Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
   - English
   - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
   - English
   - Alternative Language (Spanish)
3. Application materials

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
   - Inglés
   - Idioma alternativo (español)
2. Primer aviso (NORI, el Aviso de Recepción de Solicitud e Intención de Obtener un Permiso)
   - Inglés
   - Idioma alternativo (español)
3. Solicitud original

ATTACHMENT PLS-1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

The Premcor Refining Group Inc. (CN601420748) operates the Valero Port Arthur Refinery (RN102584026), a petroleum refinery with a throughput capacity of 430,000 barrels of crude oil per day. The facility is located at 1801 South Gulfway Drive, southwest of the City of Port Arthur, Jefferson County, Texas 77640. The application is for renewal of TPDES Permit No. WQ0000309000.

Outfall 001 may discharge up to 33,000,000 gallons per day of process wastewater, utility wastewater, ballast water, domestic wastewater, remediation wastewater, hydrostatic test water, and stormwater. Wastewater treatment includes oil/water separation, solids removal, neutralization, biological treatment, and disinfection. Discharges from the facility are expected to contain biochemical and chemical oxygen demand, suspended solids, oil and grease, phenolics, ammonia, sulfide, cyanide, and metals. Other pollutants that may be present in the discharge are found in Worksheet 2 of the application.

Outfalls 004, 005A/B/C, 006, 008, 010, 011, 012, 013, and 014 may discharge stormwater and miscellaneous wastewaters such as hydrostatic test water, uncontaminated condensates, potable water, and wash waters. Outfalls 006, 008, 013, and 014 are authorized but have not yet been constructed. Outfalls 004, 005A/B/C, and 010 also discharge utility wastewaters. Discharges from all of the stormwater outfalls is intermittent and variable. Discharges may contain organic carbon, oil and grease, suspended solids, and metals. Other pollutants that may be present are found in Worksheet 2 of the application.

ATTACHMENT PLS-1

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES INDUSTRIALES/AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Premcor Refining Group Inc. (CN601420748) opera la Refinería Valero Port Arthur (RN102584026), una refinería de petróleo con una capacidad de producción de 430,000 barriles de crudo al día. La instalación está situada en 1801 South Gulfway Drive, al suroeste de la ciudad de Port Arthur, Condado de Jefferson, Texas 77640. La solicitud se refiere a la renovación del permiso TPDES nº WQ0000309000.

El emisario 001 puede verter hasta 33,000,000 galones diarios de aguas residuales de proceso, aguas residuales de servicios públicos, aguas de lastre, aguas residuales domésticas, aguas residuales de remediación, aguas de pruebas hidrostáticas y aguas pluviales. El tratamiento de las aguas residuales incluye la separación de agua y aceite, la eliminación de sólidos, la neutralización, el tratamiento biológico y la desinfección. Se prevé que los vertidos de la instalación contengan demanda bioquímica y química de oxígeno, sólidos en suspensión, aceites y grasas, fenoles, amoníaco, sulfuro, cianuro y metales. En la Worksheet 2 de la solicitud figuran otros contaminantes que pueden estar presentes en el vertido.

Los emisarios 004, 005A/B/C, 006, 008, 010, 011, 012, 013 y 014 pueden verter aguas pluviales y aguas residuales diversas, como agua de pruebas hidrostáticas, condensados no contaminados, agua potable y aguas de lavado. Los emisarios 006, 008, 013 y 014 están autorizados pero aún no se han construido. Los emisarios 004, 005A/B/C y 010 también vierten aguas residuales de servicios públicos. Los vertidos de todos los emisarios de aguas pluviales son intermitentes y variables. Los vertidos pueden contener carbono orgánico, aceite y grasa, sólidos en suspensión y metales. Otros contaminantes que pueden estar presentes se encuentran en la Worksheet 2 de la solicitud.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL

PERMIT NO. WQ0000309000

APPLICATION. The Premcor Refining Group Inc., P.O. Box 909, Port Arthur, Texas 77641, which owns the Valero Port Arthur Refinery has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0000309000 (EPA I.D. No. TX0005991) to authorize the discharge of treated wastewater and stormwater at a volume not to exceed a daily average flow of 33,000,000 gallons per day via 001 and stormwater at an intermittent variable-rate via outfalls 004, 005A, 005B, 005C, 006, 008, 010, 011, 012, 013 and 014. The facility is located at 1801 South Gulfway Drive, near the city of Port Arthur, in Jefferson County, Texas 77640. The discharge route is from the plant site via Outfalls 001, 005B, 005C, and 006 directly to the Taylor Bayou Tidal (Jefferson County Drainage District (JCDD) No. 7 Main Outfall Canal) portion of the Intracoastal Waterway Tidal; via Outfall 005A to Alligator Bayou (Main Canal D), via Outfall 008 to an unnamed pond, thence to an unnamed ditch, thence to Alligator Bayou (Main Canal D), via Outfall 010 to a refinery ditch, thence to Alligator Bayou (Main Canal D), via Outfalls 011 and 012 to an unnamed channel, thence to an unnamed pond, thence to an unnamed ditch, thence to Alligator Bayou (Main Canal D), thence all outfalls to the Taylor Bayou Tidal (JCDD No. 7 Main Outfall Canal) portion of the Intracoastal Waterway Tidal; and via Outfall 004 to an unnamed ditch, thence to West Basin, and via Outfalls 013 and 014 to JCDD No. 7 Foley Outfall Canal, thence all outfalls to the Sabine-Neches Canal Tidal. TCEQ received this application on August 8, 2024. The permit application will be available for viewing and copying at Port Arthur Public Library, 4615 9th Avenue, Port Arthur, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-93.969166,29.855833&level=18

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications. El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing.** A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at **https://www14.tceq.texas.gov/epic/eComment/**, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from The Premcor Refining Group Inc. at the address stated above or by calling Mr. Luke Holloway, Environmental Manager, at 409-985-1011.

Issuance Date: September 24, 2024

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECIBO DE LA SOLICITUD Y
EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA
RENOVACION

PERMISO NO. WQ0000309000

SOLICITUD. Premcor Refining Group Inc., P.O. Box 909, Port Arthur, Texas 77641, propietaria de la Valero Port Arthur Refinery, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) la renovación del Permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES) No. WQ0000309000 (EPA I.D. No. TX0005991) autorizar la descarga de aguas residuales y pluviales tratadas a un volumen que no exceda un caudal promedio diario de 33,000,000 galones por día a través de 001 y aguas pluviales a una tasa variable intermitente a través de los emisarios 004, 005A, 005B, 005C, 006, 008, 010, 011, 012, 013 y 014. La planta está ubicada en 1801 South Gulfway Drive, cerca de la ciudad de Port Arthur, en el Condado de Jefferson, Texas 77640. La ruta de descarga es desde el sitio de la planta a través de los desagües 001, 005B, 005C y 006 directamente a la porción de Taylor Bayou Tidal (Distrito de Drenaje del Condado de Jefferson (JCDD) No. 7 Main Outoutlet Canal) de la Marea del Canal Intracostero; a través del emisario 005A a Alligator Bayou (canal principal D), a través del desagüe 008 a un estanque sin nombre, de allí a una zanja sin nombre, de allí a Alligator Bayou (canal principal D), a través del emisario 010 a una zanja de refinería, de allí a Alligator Bayou (canal principal D), a través de los emisarios 011 y 012 a un canal sin nombre, de allí a un estanque sin nombre, de allí a una zanja sin nombre, de allí a Alligator Bayou (Canal Principal D), de allí todos los emisarios a la porción de Taylor Bayou Tidal (JCDD No. 7 Main Outdrop Canal) de la Marea del Canal Intracostero; y a través del emisario 004 a una zanja sin nombre, de allí a la cuenca oeste, y a través de los emisarios 013 y 014 al canal de desagüe JCDD No. 7 Foley, de allí todos los emisarios al canal Sabine-Neches Tidal. La TCEQ recibió esta solicitud el 8 de agosto de 2024. La solicitud de permiso está disponible para leerla y copiarla en la Biblioteca Pública de Port Arthur, 4615 9th Avenue, Port Arthur, en el Condado de Jefferson, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en el siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdesapplications.
Este enlace a un mapa electrónico de la ubicación general del sitio o instalación es proporcionado como una cortesía pública y no forma parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-93.969166,29.855833&level=18

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la

dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Premcor Refining Group Inc. a la dirección indicada arriba o llamando a Sr. Luke Holloway, Environmental Manager, al 409-985-1011.

Fecha de emisión 24 de septiembre de 2024

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 8, 2024

Dear Applicant:

Re: Confirmation of Submission of the Renewal without changes for Industrial Wastewater Authorization.

This is an acknowledgement that you have successfully completed Renewal without changes for the Industrial Wastewater authorization.

ER Account Number: ER052733
Application Reference Number: 669472
Authorization Number: WQ0000309000
Site Name: Valero Port Arthur Refinery
Regulated Entity: RN102584026 - Valero Port Arthur Refinery
Customer(s): CN601420748 - The Premcor Refining Group Inc.

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

Texas Commission on Environmental Quality

Update Domestic or Industrial Individual Permit

WQ0000309000

Site Information (Regulated Entity)

What is the name of the site to be authorized?	VALERO PORT ARTHUR REFINERY
Does the site have a physical address?	Yes
Physical Address	
Number and Street	1801 S GULFWAY DR
City	PORT ARTHUR
State	TX
ZIP	77640
County	JEFFERSON
Latitude (N) (##.######)	29.855833
Longitude (W) (-###.######)	-93.969166
Primary SIC Code	2911
Secondary SIC Code	
Primary NAICS Code	324110
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN102584026
What is the name of the Regulated Entity (RE)?	VALERO PORT ARTHUR REFINERY
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	1801 S GULFWAY DR
City	PORT ARTHUR
State	TX
ZIP	77640
County	JEFFERSON
Latitude (N) (##.######)	30.7469
Longitude (W) (-###.######)	-93.9888
Facility NAICS Code	
What is the primary business of this entity?	PETROLEUM REFINING

The Pre-Customer (Applicant) Information (Owner)

How is this applicant associated with this site?	Owner
What is the applicant's Customer Number (CN)?	CN601420748
Type of Customer	Corporation

Full legal name of the applicant:	
Legal Name	The Premcor Refining Group Inc.
Texas SOS Filing Number	7803606
Federal Tax ID	431491230
State Franchise Tax ID	14314912305
State Sales Tax ID	
Local Tax ID	
DUNS Number	199623414
Number of Employees	501+
Independently Owned and Operated?	
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes

Responsible Authority Contact	
Organization Name	The Premcor Refining Group Inc.
Prefix	MR
First	JERRY
Middle	
Last	STUMBO
Suffix	
Credentials	
Title	GENERAL MANAGER AND VICE PRESIDENT

Responsible Authority Mailing Address	
Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 909
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ARTHUR
State	TX
ZIP	77641
Phone (###-###-####)	4099851471
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	JERRY.STUMBO@VALERO.COM

Billing Contact

Responsible contact for receiving billing statements:	
Select the permittee that is responsible for payment of the annual fee.	CN601420748, The Premcor Refining Group Inc.

Organization Name	THE PREMCOR REFINING GROUP INC
Prefix	
First	AMBER
Middle	
Last	HANNING
Suffix	
Credentials	
Title	
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 909
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ARTHUR
State	TX
ZIP	77641
Phone (###-###-####)	4099851031
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	4099851575
E-mail	MIMI.HANNING@VALERO.COM

Application Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	
Organization Name	THE PREMCOR REFINING GROUP INC
Prefix	MS
First	MEGAN
Middle	
Last	TAWNEY
Suffix	
Credentials	
Title	SR. ENVIRONMENTAL ENGINEER
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 909

Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ARTHUR
State	TX
ZIP	77641
Phone (###-###-####)	4099851354
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	4099851575
E-mail	MEGAN.TAWNEY@VALERO.COM

Technical Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	
Organization Name	THE PREMCOR REFINING GROUP INC
Prefix	MS
First	MEGAN
Middle	
Last	TAWNEY
Suffix	
Credentials	
Title	SR. ENVIRONMENTAL ENGINEER
Enter new address or copy one from list:	

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 909
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ARTHUR
State	TX
ZIP	77641
Phone (###-###-####)	4099851354
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	4099851575
E-mail	MEGAN.TAWNEY@VALERO.COM

DMR Contact

Person responsible for submitting Discharge Monitoring Report Forms:

Same as another contact?	
Organization Name	THE PREMCOR REFINING GROUP INC
Prefix	
First	JERRY
Middle	
Last	STUMBO
Suffix	
Credentials	
Title	VICE PRESIDENT AND GENERAL MANAGER
Enter new address or copy one from list:	
Mailing Address:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 909
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT ARTHUR
State	TX
ZIP	77641
Phone (###-###-####)	4099851471
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	JERRY.STUMBO@VALERO.COM

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	
2) Organization Name	THE PREMCOR REFINING GROUP INC
3) Prefix	
4) First	LUKE
5) Middle	
6) Last	HOLLOWAY
7) Suffix	
8) Credentials	
9) Title	MANAGER ENVIRONMENTAL
Mailing Address	
10) Enter new address or copy one from list	Application Contact

11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 909
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	PORT ARTHUR
11.4) State	TX
11.5) ZIP	77641
12) Phone (###-###-####)	4099851011
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	LUKE.HOLLOWAY@VALERO.COM

Section 2# Permit Contact

Permit Contact#: 2

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	
2) Organization Name	THE PREMCOR REFINING GROUP INC
3) Prefix	
4) First	MEGAN
5) Middle	
6) Last	TAWNEY
7) Suffix	
8) Credentials	
9) Title	SR. ENVIRONMENTAL ENGINEER

Mailing Address

10) Enter new address or copy one from list	Application Contact
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 909
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	PORT ARTHUR
11.4) State	TX
11.5) ZIP	77641
12) Phone (###-###-####)	4099851354
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	MEGAN.TAWNEY@VALERO.COM

Owner Information

Owner of Treatment Facility	
1) Prefix	
2) First and Last Name	
3) Organization Name	THE PREMCOR REFINING GROUP INC
4) Mailing Address	P.O. BOX 909
5) City	PORT ARTHUR
6) State	TX
7) Zip Code	77641
8) Phone (###-###-####)	4099851471
9) Extension	
10) Email	JERRY.STUMBO@VALER.COM
11) What is ownership of the treatment facility?	Private
Owner of Land (where treatment facility is or will be)	
12) Prefix	
13) First and Last Name	
14) Organization Name	THE PREMCOR REFINING GROUP INC
15) Mailing Address	P.O. BOX 909
16) City	PORT ARTHUR
17) State	TX
18) Zip Code	77640
19) Phone (###-###-####)	4099851471
20) Extension	
21) Email	JERRY.STUMBO@VALERO.COM
22) Is the landowner the same person as the facility owner or co-applicant?	Yes

General Information Renewal-Amendment

1) Current authorization expiration date:	02/07/2025
2) Current Facility operational status:	Active
3) Is the facility located on or does the treated effluent cross American Indian Land?	No
4) What is the application type that you are seeking?	Renewal without changes
5) Current Authorization type:	Industrial Wastewater
5.1) What is your EPA facility classification?	Major
5.1.1) Select the applicable fee	Renewal - $2,015
6) What is the classification for your authorization?	TPDES

6.1) What is the EPA Identification Number?	TX0005991
6.2) Is the wastewater treatment facility location in the existing permit accurate?	Yes
6.3) Are the point(s) of discharge and the discharge route(s) in the existing permit correct?	Yes
6.4) City nearest the outfall(s):	Port Arthur
6.5) County where the outfalls are located:	JEFFERSON
6.6) Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?	Yes
6.6.1) What is your right-of-way authorization status?	Authorization Granted
6.7) Is the daily average discharge at your facility of 5 MGD or more?	Yes
6.7.1) Provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge:	BRAZORIA|CHAMBERS|GALVESTON|HARRIS|JEFFERSON
7) Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?	No

Public Notice Information

Individual Publishing the Notices

1) Prefix	MRS
2) First and Last Name	Megan Tawney
3) Credential	
4) Title	Sr. Environmental Engineer
5) Organization Name	The Premcor Refining Group Inc
6) Mailing Address	PO BOX 909
7) Address Line 2	
8) City	PORT ARTHUR
9) State	TX
10) Zip Code	77641
11) Phone (###-###-####)	4099851354
12) Extension	
13) Fax (###-###-####)	
14) Email	megan.tawney@valero.com

Contact person to be listed in the Notices

15) Prefix	
16) First and Last Name	Luke Holloway
17) Credential	
18) Title	Environmental Manager
19) Organization Name	The Premcor Refining Group Inc
20) Phone (###-###-####)	4099851011
21) Fax (###-###-####)	

22) Email	luke.holloway@valero.com

Bilingual Notice Requirements

23) Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?	Yes
23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?	Yes
23.2) Do the students at these schools attend a bilingual education program at another location?	No
23.3) Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC 89.1205(g)?	No
23.4) Which language is required by the bilingual program?	Spanish

Section 1# Public Viewing Information

County#: 1

1) County	JEFFERSON
2) Public building name	Port Arthur Public Library
3) Location within the building	
4) Physical Address of Building	4615 9th Avenue
5) City	Port Arthur
6) Contact Name	
7) Phone (###-###-####)	4099858838
8) Extension	
9) Is the location open to the public?	Yes

Plain Language

1) Plain Language

[File Properties]

File Name	LANG_PLS-1 WQ0000309000 Plain Language Summary.pdf
Hash	E4DA061A10CC78765866F134B8C6A69A2D4AFB4D2115151ACD7CBEFCA50CAEE3
MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)

[File Properties]

File Name	SPIF_SPIF-1 WQ0000309000 Supplemental Permit Information Form.pdf

Hash	B918550F762065430A8A0238155C5DFAA0CF80381CAF23C18AC67D75E4101867
MIME-Type	application/pdf

[File Properties]

File Name	SPIF_SPIF-2 WQ0000309000 USGS Map.pdf
Hash	6760B6ECA9B63CEDB887947367C85174E39271F504B0292A9871EB9E19592F21
MIME-Type	application/pdf

Industrial Attachments

1) Attach an 8.5"x11", reproduced portion of the most current and original USGS Topographic Quadrangle Map(s) that meets the 1:24,000 scale.

[File Properties]

File Name	MAP_A-2 WQ0000309000 USGS Map.pdf
Hash	2F6EA010BEEFA86004EF7F81A883FE6E9B1E003685B5AB3C0555B3EEE8FF69C0
MIME-Type	application/pdf

2) Copy of the proof of contact or approval letter for discharge to public ditch or right-of-way.

[File Properties]

File Name	DIS_A-5 WQ0000309000 JCDD7 Letter 1-14-2019.pdf
Hash	45782CE1215CCC3DF7FB9950674202C0CEC4ECC92946609274F6B9F60AF9CEE9
MIME-Type	application/pdf

3) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
3.1) I confirm that Worksheet 2.0 (Pollutant Analyses Requirements) is complete and included in the Technical Attachment.	Yes
3.2) I confirm that Worksheet 4.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
3.3) Are you planning to include Worksheet 4.1 (Waterbody Physical Characteristics) in the Technical Attachment?	No
3.4) Are you planning to include Worksheet 6.0 (Industrial Waste Contribution) in the Technical Attachment?	No
3.5) Are you planning to include Worksheet 7.0 (Stormwater Discharges Associated with Industrial Activities) to the Technical Attachment?	No
3.6) Are you planning to include Worksheet 8.0 (Aquaculture) in the Technical Attachment?	No
3.7) Are you planning to include Worksheet 9.0 (Class V Injection Well Inventory/Authorization) in the Technical Attachment?	No
3.8) Are you planning to include Worksheet 10.0 (Quarries in the John Graves Scenic Riverway) in the Technical Attachment?	No

3.9) Are you planning to include Worksheet 11.0 (Cooling Water System Information) in the Technical Attachment?	No
3.10) Are you planning to include Worksheet 11.1 (Impingement Mortality) in the Technical Attachment?	No
3.11) Are you planning to include Worksheet 11.2 (Source Water Biological Data) in the Technical Attachment?	No
3.12) Are you planning to include Worksheet 11.3 (Entrainment) in the Technical Attachment?	No

3.13) Technical Attachment

[File Properties]

File Name	TECH_WQ0000309000 VPA TPDES Technical Report.pdf
Hash	145BCD9FA8EAFFF45DA7D4F0EA1E47282B5DEB61C0200A5C2D7522C6D8536A98
MIME-Type	application/pdf

4) Flow Diagram

[File Properties]

File Name	FLDIA_T-2 WQ0000309000 flow diagram.pdf
Hash	561EF81E3CEB16C069AB026955C51442FE299AAA300997E58A78A2DE3B7F0861
MIME-Type	application/pdf

5) Site Drawing

[File Properties]

File Name	SITEDR_T-3 WQ0000309000 Overall Map.pdf
Hash	A68CC76D311F129F78F87F41DF11F7D7D0C8775EC71E42B486CAF07EB97D7245
MIME-Type	application/pdf

6) Design Calculations

[File Properties]

File Name	DES_CAL_WQ0000309000 Table 4 Refining Production Levels.pdf
Hash	B0049C722A22898DAF5E5F2F6B0C15F60C7867822EDE6FE4171411586DBA3B15
MIME-Type	application/pdf

7) Solids Management Plan

8) Water Balance

[File Properties]

File Name	WB_WQ0000309000 Table 2 Outfall Wastewaters.pdf
Hash	30C2D53CD5E64E05217E16912943E695CFB845F1860B61435F5B999FC1E38B32
MIME-Type	application/pdf

9) Other Attachments

[File Properties]	
File Name	OTHER_A-1 WQ0000309000 Core Data Form.pdf
Hash	73787B013DD18AF62647AD8619D1F365F3530DDC4E1AD2F73709E14FA250AF6B
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_W2-1 WQ000309000 Analytical Laboratories.pdf
Hash	8DDC9FF58CDE6E2BF93AF7F2035C0E358F74E0D56F9CEEF75F17BA890DB12295
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_T-4 WQ0000309000 Tier2 Reports.pdf
Hash	07D3E63A46108710787EC48A30975BABFAA0D035CBFBCB3AA22C96EC6DBD9B10
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_T-1 WQ0000309000 Facility Description 2024.pdf
Hash	2D100FBB9027588AB7B24F9DE3746ED6075556129892473EC174C44C95511A18
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_T-5 WQ0000309000 treatment chemicals table.pdf
Hash	BFECAD64BFBF0BE42C27684A12AAEE49327A1EEF55190E387C839793A899A08D
MIME-Type	application/pdf
[File Properties]	
File Name	OTHER_T-5 WQ0000309000 treatment chemicals SDSs.pdf
Hash	EEFB4C51456AB9871584CEB5921F52BFA31F56EB1B22DCC5B449EF6CBF8AF722
MIME-Type	application/pdf

Certification

I certify that I am authorized under 30 Texas Administrative Code 305.44 to sign this document and can provide documentation in proof of such authorization upon request.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

1. I am Jerry D Stumbo, the owner of the STEERS account ER106814.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Update Domestic or Industrial Individual Permit WQ0000309000.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER Signature: Jerry D Stumbo OWNER

Customer Number:	CN601420748
Legal Name:	The Premcor Refining Group Inc.
Account Number:	ER106814
Signature IP Address:	170.111.3.212
Signature Date:	2024-08-08
Signature Hash:	DEBE0C2F4847E0B406D0270D6458A1A472F855E561D752A323A9C85E0B685938
Form Hash Code at time of Signature:	1653C5735EF4D250BD89108D4FB36F4F41CA83B45AF6A9F839625078B8E5DF57

Fee Payment

Transaction by:	The application fee payment transaction was made by ER052733/Megan Tawney
Paid by:	The application fee was paid by MEGAN TAWNEY
Fee Amount:	$2000.00
Paid Date:	The application fee was paid on 2024-08-08
Transaction/Voucher number:	The transaction number is 582EA000620838 and the voucher number is 716467

Submission

Reference Number:	The application reference number is 669472
Submitted by:	The application was submitted by ER052733/Megan Tawney
Submitted Timestamp:	The application was submitted on 2024-08-08 at 15:27:35 CDT

Submitted From:	The application was submitted from IP address 170.111.3.179
Confirmation Number:	The confirmation number is 556062
Steers Version:	The STEERS version is 6.80
Permit Number:	The permit number is WQ0000309000

Additional Information

Application Creator: This account was created by Megan Tawney

ATTACHMENT A-1
TCEQ Core Data Form

TCEQ Use Only

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☐ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☒ Renewal *(Core Data Form should be submitted with the renewal form)*

☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 601420748		RN 102584026

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

THE PREMCOR REFINING GROUP INC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0007803606	14314912305	43-1491230	82-978-1413

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees ☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher

13. Independently Owned and Operated? ☐ Yes ☒ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:

☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:

PO BOX 909

City	PORT ARTHUR	State	TX	ZIP	77641	ZIP + 4	0909

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	JERRY.STUMBO@VALERO.COM

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(409) 985-1471		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

VALERO PORT ARTHUR REFINERY

23. Street Address of the Regulated Entity: *(No PO Boxes)*	1801 SOUTH GULFWAY DRIVE							
	City	PORT ARTHUR	**State**	TX	**ZIP**	77640	**ZIP + 4**	
24. County	JEFFERSON							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	N/A							
26. Nearest City				**State**		**Nearest ZIP Code**		
PORT ARTHUR				TX		77640		

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	29.855833		**28. Longitude (W) In Decimal:**	93.969166	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	51	21	93	58	09

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
2911		32411	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

PETROLEUM REFINING

34. Mailing Address:	PO BOX 909							
	City	PORT ARTHUR	**State**	TX	**ZIP**	77641	**ZIP + 4**	909
35. E-Mail Address:								

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(409) 985-1471		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0000309000			

SECTION IV: Preparer Information

40. Name:	MEGAN TAWNEY	**41. Title:**	SR ENVIRONMENTAL ENGINEER

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(409) 985-1354		( ) -	MEGAN.TAWNEY@VALERO.COM

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	THE PREMCOR REFINING GROUP INC	**Job Title:**	VICE PRESIDENT AND GENERAL MANAGER
Name *(In Print):*	JERRY STUMBO	**Phone:**	(409) 985- 1471
Signature:	Jerry Stumbo	**Date:**	07/31/2024

ATTACHMENT PLS-1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. Applicants may modify the template as necessary to accurately describe their facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

The Premcor Refining Group Inc. (CN601420748) operates the Valero Port Arthur Refinery (RN102584026), a petroleum refinery with a throughput capacity of 430,000 barrels of crude oil per day. The facility is located at 1801 South Gulfway Drive, southwest of the City of Port Arthur, Jefferson County, Texas 77640. The application is for renewal of TPDES Permit No. WQ0000309000.

Outfall 001 may discharge up to 33,000,000 gallons per day of process wastewater, utility wastewater, ballast water, domestic wastewater, remediation wastewater, hydrostatic test water, and stormwater. Wastewater treatment includes oil/water separation, solids removal, neutralization, biological treatment, and disinfection. Discharges from the facility are expected to contain biochemical and chemical oxygen demand, suspended solids, oil and grease, phenolics, ammonia, sulfide, cyanide, and metals. Other pollutants that may be present in the discharge are found in Worksheet 2 of the application.

Outfalls 004, 005A/B/C, 006, 008, 010, 011, 012, 013, and 014 may discharge stormwater and miscellaneous wastewaters such as hydrostatic test water, uncontaminated condensates, potable water, and wash waters. Outfalls 006, 008, 013, and 014 are authorized but have not yet been constructed. Outfalls 004, 005A/B/C, and 010 also discharge utility wastewaters. Discharges from all of the stormwater outfalls is intermittent and variable. Discharges may contain organic carbon, oil and grease, suspended solids, and metals. Other pollutants that may be present are found in Worksheet 2 of the application.

ATTACHMENT PLS-1

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

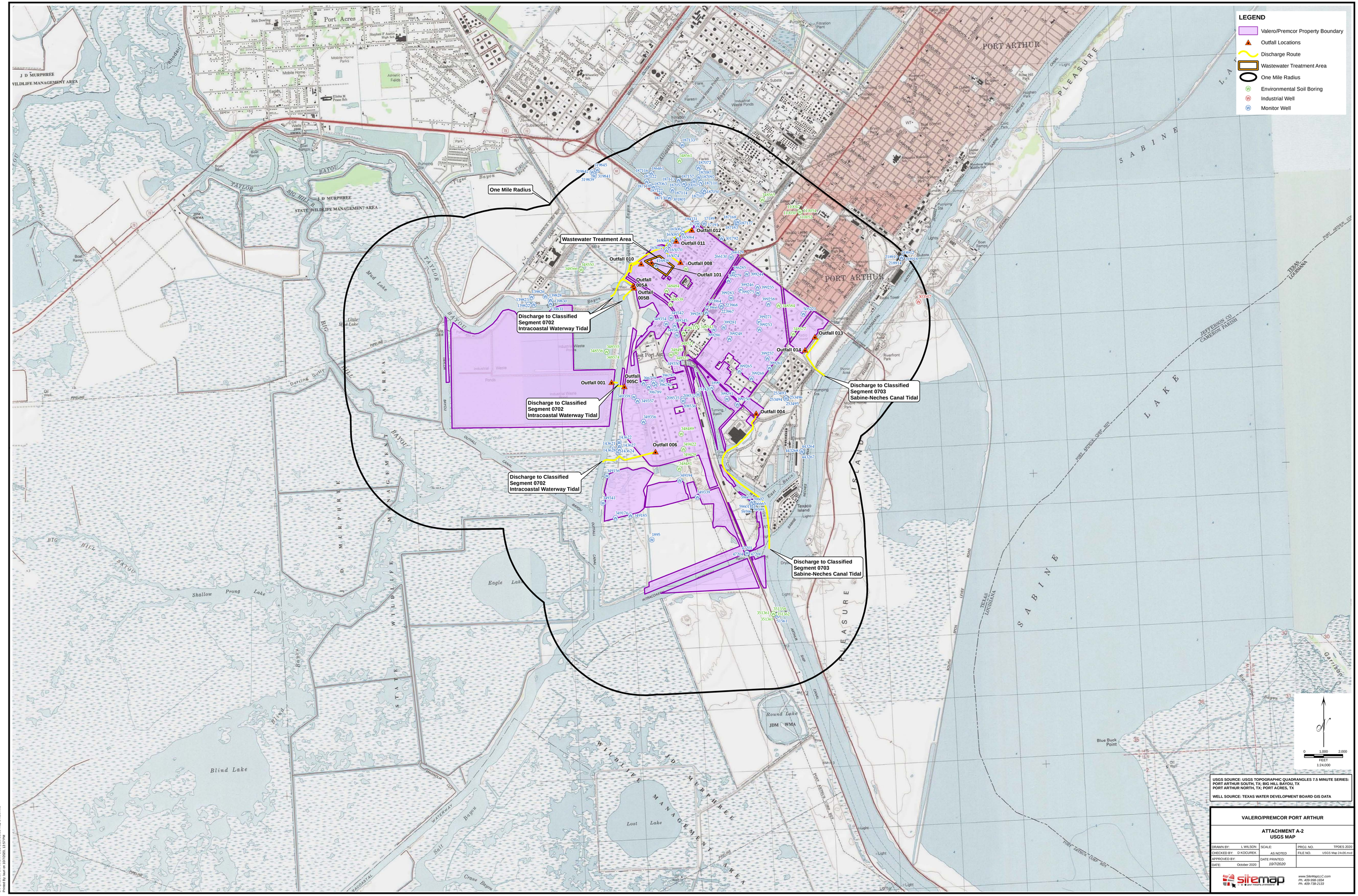
AGUAS RESIDUALES INDUSTRIALES/AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Premcor Refining Group Inc. (CN601420748) opera la Refinería Valero Port Arthur (RN102584026), una refinería de petróleo con una capacidad de producción de 430,000 barriles de crudo al día. La instalación está situada en 1801 South Gulfway Drive, al suroeste de la ciudad de Port Arthur, Condado de Jefferson, Texas 77640. La solicitud se refiere a la renovación del permiso TPDES nº WQ0000309000.

El emisario 001 puede verter hasta 33,000,000 galones diarios de aguas residuales de proceso, aguas residuales de servicios públicos, aguas de lastre, aguas residuales domésticas, aguas residuales de remediación, aguas de pruebas hidrostáticas y aguas pluviales. El tratamiento de las aguas residuales incluye la separación de agua y aceite, la eliminación de sólidos, la neutralización, el tratamiento biológico y la desinfección. Se prevé que los vertidos de la instalación contengan demanda bioquímica y química de oxígeno, sólidos en suspensión, aceites y grasas, fenoles, amoníaco, sulfuro, cianuro y metales. En la Worksheet 2 de la solicitud figuran otros contaminantes que pueden estar presentes en el vertido.

Los emisarios 004, 005A/B/C, 006, 008, 010, 011, 012, 013 y 014 pueden verter aguas pluviales y aguas residuales diversas, como agua de pruebas hidrostáticas, condensados no contaminados, agua potable y aguas de lavado. Los emisarios 006, 008, 013 y 014 están autorizados pero aún no se han construido. Los emisarios 004, 005A/B/C y 010 también vierten aguas residuales de servicios públicos. Los vertidos de todos los emisarios de aguas pluviales son intermitentes y variables. Los vertidos pueden contener carbono orgánico, aceite y grasa, sólidos en suspensión y metales. Otros contaminantes que pueden estar presentes se encuentran en la Worksheet 2 de la solicitud.



J:\Proj\Valero\Port Arthur\TPDES 2020\USGS Map 24x36.mxd
Revised by: lwilson 8/20/2020, 1:31:37 PM

ATTACHMENT SPIF-1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: _____Renewal _____Major Amendment ____Minor Amendment _____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: The Premcor Refining Group Inc.

   Permit No. WQ00 00309000 EPA ID No. TX 0005991

   Address of the project (or a location description that includes street/highway, city/vicinity, and county):

   1801 South Gulfway Drive, southwest of the City of Port Arthur, Jefferson County, Texas 77640

ATTACHMENT SPIF-1

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Luke Holloway

Credential (P.E, P.G., Ph.D., etc.): N/A

Title: Environmental Manager

Mailing Address: P.O. Box 909

City, State, Zip Code: Port Arthur, TX 77641

Phone No.: 409-985-1011 Ext.: N/A Fax No.: N/A

E-mail Address: Luke.Holloway@valero.com

2. List the county in which the facility is located: Jefferson
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

   N/A

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

   Via Outfalls 001, 005B, 005C, and 006 directly to the Taylor Bayou Tidal (Jefferson County Drainage District (JCDD) No. 7 Main Outfall Canal) portion of the Intracoastal Waterway Tidal in Segment No. 0702 of the Neches-Trinity Coastal Basin; via Outfall 005A to Alligator Bayou (Main Canal D), via Outfall 008 to an unnamed pond, thence to an unnamed ditch, thence to Alligator Bayou (Main Canal D), via Outfall 010 to a refinery ditch, thence to Alligator Bayou (Main Canal D), and via Outfalls 011 and 012 to an unnamed channel, thence to an unnamed pond, thence to an unnamed ditch, thence to Alligator Bayou (Main Canal D), thence all outfalls to the Taylor Bayou Tidal (JCDD No. 7 Main Outfall Canal) portion of the Intracoastal Waterway Tidal in Segment No. 0702; and via Outfall 004 to an unnamed ditch, thence to West Basin, and via Outfalls 013 and 014 to JCDD No. 7 Foley Outfall Canal, thence all outfalls to Sabine-Neches Canal Tidal in Segment No. 0703 of the Neches-Trinity Coastal Basin.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

   Attachment: SPIF-2 USGS Map

   Provide original photographs of any structures 50 years or older on the property.

   Construction has been almost continuous since 1901. There remain some structures older than 50 years; units built prior to 1970 that would still have some original equipment in place are FCCU 1241, SGRU 1242, HFAU 443, and BH 15 and 18.

ATTACHMENT SPIF-1

Does your project involve any of the following? Check all that apply.

None

- ☐ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☐ Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features
- ☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

   N/A

2. Describe existing disturbances, vegetation, and land use:

   The site is a petroleum refinery with production and material storage/transfer areas and wastewater treatment system.

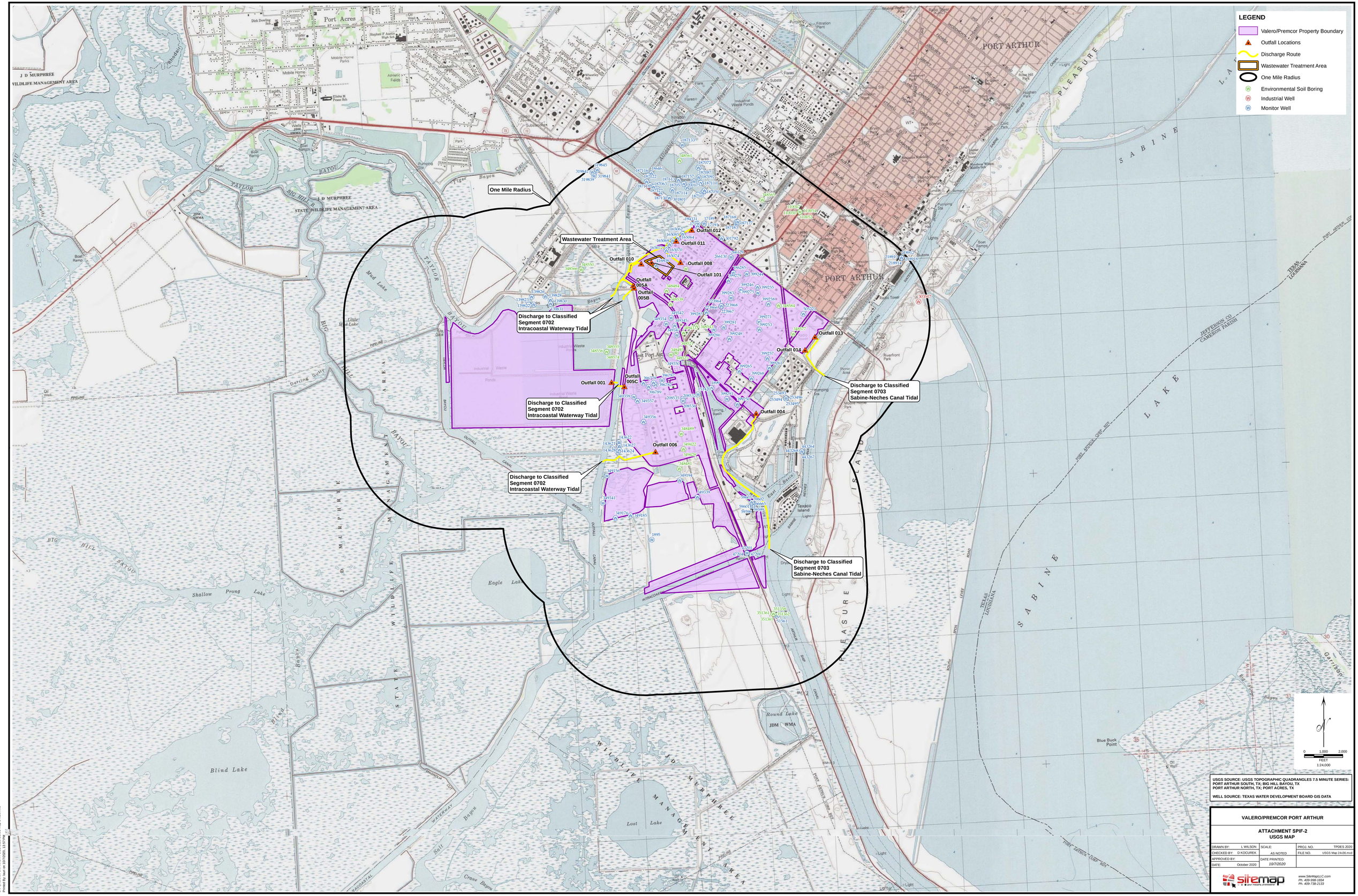
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

   Construction has been almost continuous since 1901.

4. Provide a brief history of the property, and name of the architect/builder, if known.

   Original construction by Gulf Oil Corporation. Architect/builder unknown.



J:\Proj\Valero\Port Arthur\TPDES 2020\GIS\USGS Map 24x36.mxd
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The Premcor Refining Group Inc.
TPDES Permit No. WQ0000309000
Renewal Application 2024

Application Contents

Technical Report 1.0
Worksheet 1 - Effluent Guidelines
Worksheet 2 - Outfall Analyses
Worksheet 4 - Receiving Waters

Attachments

		Cross-reference to Application Item
SPIF-1	Supplemental Permit Information Form (SPIF)	
SPIF-2	USGS Map	
PLS-1	Plain Language Summary	
A-1	Core Data Form	
A-2	USGS Map	
A-5	Letter from Jefferson County Drainage District No. 7 (1-14-19)	
W2-1	Analytical Laboratories	W2-1.c
T-1	Facility Description	TR-1.b
	Table 1. Wastewater Treatment Units	TR-2.a
	Table 2. Outfall Wastewaters	TR-4
	Table 3. Third Party Wastes	TR-10
	Table 4. Refining Production Levels	W1-1.a
T-2	Drawing No. ENV-8742-K1 (WWTU No. 8742)	TR-2.b
T-3	Overall Map	TR-1.d
T-4	Tier 2 Reports	TR-1.c
T-5	Treatment Chemicals and SDSs	TR-5

Reference Key

SPIF	Supplemental Permit Information Form
TR	Technical Report
W#	Worksheet number

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

The following information **is required** for all applications for a TLAP or an individual TPDES discharge permit.

For **additional information** or clarification on the requested information, please refer to the Instructions for Completing the Industrial Wastewater Permit Application[1] available on the TCEQ website. Please contact the Industrial Permits Team at 512-239-4671 with any questions about this form.

If more than one outfall is included in the application, provide applicable information for each individual outfall. **If an item does not apply to the facility, enter N/A** to indicate that the item has been considered. Include separate reports or additional sheets as **clearly cross-referenced attachments** and provide the attachment number in the space provided for the item the attachment addresses.

NOTE: This application is for an industrial wastewater permit only. Additional authorizations from the TCEQ Waste Permits Division or the TCEQ Air Permits Division may be needed.

Item 1. Facility/Site Information (Instructions, Page 39)

a. Describe the general nature of the business and type(s) of industrial and commercial activities. Include all applicable SIC codes (up to 4).

The Valero Port Arthur Refinery is a petroleum refinery (SIC 2911) with integrated chemicals production.

Diamond Green Diesel LLC (DGD) is a green diesel production facility (SIC 2869) located on-site. DGD is the operating subsidiary of Diamond Green Diesel Holding LLC, a joint venture formed by Diamond Alternative Energy LLC (a wholly-owned subsidiary of Valero Energy Corporation) and Darling Green Energy LLC (a wholly-owned subsidiary of Darling Ingredients, Inc.) The DGD plant converts waste grease, animal fats (e.g. tallow byproducts from food processors), used cooling oils, and other plant and vegetable oils into renewable fuel products, including diesel, renewable naphtha/gasoline, renewable liquid petroleum gases (LPG)/propane, and light end gases (LEG). DGD is expected to start up a sustainable aviation fuel (SAF) unit in 2024. The SAF unit will allow DGD to take a portion of the produced renewable diesel and convert it into renewable jet fuel.

b. Describe all wastewater-generating processes at the facility.

See Attachment T-1 Facility Description.

[1] https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html

c. Provide a list of raw materials, major intermediates, and final products handled at the facility.

Materials List

Raw Materials	Intermediate Products	Final Products
The list of materials below is for DGD operations. For Valero and third party entities, see Attachment T-4 Tier2 Reports.		
DGD Operations		
Waste grease, animal fats, used cooking oils, and other plant and vegetable oils	N/A	Green diesel (renewable diesel) [1159170-26-9]
Bleaching earth		Light end gas (LEG)
Filter aid		Liquid petroleum gas (LPG) [68476-85-7] / renewable naphtha [8030-30-6]
Citric acid [77-92-9]		SAF (sustainable aviation fuel) [2252265-89-5]

Attachment: T-4 Tier2 Reports

d. Attach a facility map (drawn to scale) with the following information:

- Production areas, maintenance areas, materials-handling areas, waste-disposal areas, and water intake structures.
- The location of each unit of the WWTP including the location of wastewater collection sumps, impoundments, outfalls, and sampling points, if significantly different from outfall locations.

Attachment: T-3 Overall Map

e. Is this a new permit application for an existing facility?

☐ Yes ☒ No

If **yes**, provide background discussion: N/A

f. Is/will the treatment facility/disposal site be located above the 100-year frequency flood level.

☐ Yes ☒ No

List source(s) used to determine 100-year frequency flood plain: National Flood Insurance Program, Flood Insurance Rate Map, Jefferson County, Texas, Panel 430 of 600, Community Panel Number 480385 0430 B, June 1, 1983, FEMA

If **no**, provide the elevation of the 100-year frequency flood plain and describe what protective measures are used/proposed to prevent flooding (including tail water and rainfall run-on controls) of the treatment facility and disposal area: Only the tertiary treatment pond following the wastewater treatment plant is within the 100-year floodplain. Floodplain elevation in the area of the tertiary treatment pond is 12 feet. The pond is protected by flood control dikes. As a requirement of its 2002-2005 TPDES permit, Premcor submitted a plan to TCEQ that outlined the flood protection measures for the wastewater treatment facilities

Attachment: N/A

g. For **new** or **major amendment** permit applications, will any construction operations result in a discharge of fill material into a water in the state?

☐ Yes ☒ No ☐ N/A (renewal only)

h. If **yes** to Item 1.g, has the applicant applied for a USACE CWA Chapter 404 Dredge and Fill permit?

☐ Yes ☐ No

If **yes**, provide the permit number: N/A

If **no**, provide an approximate date of application submittal to the USACE: N/A

Item 2. Treatment System (Instructions, Page 40)

a. List any physical, chemical, or biological treatment process(es) used/proposed to treat wastewater at this facility. Include a description of each treatment process, starting with initial treatment and finishing with the outfall/point of disposal.

See Attachment T-1 Facility Description.

b. Attach a flow schematic **with a water balance** showing all sources of water and wastewater flow into the facility, wastewater flow into and from each treatment unit, and wastewater flow to each outfall/point of disposal.

Attachment: T-2 Drawing No. ENV-8742-K1 (WWTU No. 8742)

Item 3. Impoundments (Instructions, Page 40)

Does the facility use or plan to use any wastewater impoundments (e.g., lagoons or ponds?)

☒ Yes ☐ No

If **no**, proceed to Item 4. If **yes**, complete **Item 3.a** for **existing** impoundments and **Items 3.a - 3.e** for **new or proposed** impoundments. **NOTE:** See instructions, Pages 40-42, for additional information on the attachments required by Items 3.a – 3.e.

a. Complete the table with the following information for each existing, new, or proposed impoundment. Attach additional copies of the Impoundment Information table, if needed.

Use Designation: Indicate the use designation for each impoundment as Treatment (**T**), Disposal (**D**), Containment (**C**), or Evaporation (**E**).

Associated Outfall Number: Provide an outfall number if a discharge occurs or will occur.

Liner Type: Indicate the liner type as Compacted clay liner (**C**), In-situ clay liner (**I**), Synthetic/plastic/rubber liner (**S**), or Alternate liner (**A**). **NOTE:** See instructions for further detail on liner specifications. If an alternate liner (A) is selected, include an attachment that provides a description of the alternate liner and any additional technical information necessary for an evaluation.

Leak Detection System: If any leak detection systems are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no.

Groundwater Monitoring Wells and Data: If groundwater monitoring wells are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no. Attach any existing groundwater monitoring data.

Dimensions: Provide the dimensions, freeboard, surface area, storage capacity of the impoundments, and the maximum depth (not including freeboard). For impoundments with irregular shapes, submit surface area instead of length and width.

Compliance with 40 CFR Part 257, Subpart D: If the impoundment is required to be in compliance with 40 CFR Part 257, Subpart D, enter **Y** for yes. Otherwise, enter **N** for no.

Date of Construction: Enter the date construction of the impoundment commenced (mm/dd/yy).

Impoundment Information

Parameter	**Pond #1 Tertiary Treatment Pond**	**Pond #2 Storm Water Surge Basin No. 10**	**Pond #3 Unnamed Pond**
Use Designation: (T) (D) (C) or (E)	T	C	C
Associated Outfall Number	001	004	008
Liner Type (C) (I) (S) or (A)	Natural clay liner	N/A	N/A
Alt. Liner Attachment Reference	N/A	N/A	N/A
Leak Detection System, Y/N	N	N	N
Groundwater Monitoring Wells, Y/N	N	N	N
Groundwater Monitoring Data Attachment	N/A	N/A	N/A
Pond Bottom Located Above The Seasonal High-Water Table, Y/N	N	Y	Y
Length (ft)	Irregular	~635	Irregular
Width (ft)	Irregular	~330	Irregular
Max Depth From Water Surface (ft), Not Including Freeboard	4	N/A	N/A
Freeboard (ft)	~2	N/A	N/A
Surface Area (acres)	562	4.8	3.0
Storage Capacity (gallons)	732,000,000	N/A	N/A
40 CFR Part 257, Subpart D, Y/N	N	N	N
Date of Construction	Prior to 1938	1941	Prior to 1938

Attachment: N/A

The following information (**Items 3.b – 3.e**) is required only for **new or proposed** impoundments.

N/A – There are no new or proposed impoundments.

b. For new or proposed impoundments, attach any available information on the following items. If attached, check **yes** in the appropriate box. Otherwise, check **no** or **not yet designed**.

1. Liner data

☐ Yes ☐ No ☐ Not yet designed

2. Leak detection system or groundwater monitoring data

☐ Yes ☐ No ☐ Not yet designed

3. Groundwater impacts

☐ Yes ☐ No ☐ Not yet designed

NOTE: Item b.3 is required if the bottom of the pond is not above the seasonal high-water table in the shallowest water-bearing zone.

Attachment: N/A

For TLAP applications: Items 3.c – 3.e are **not required**, continue to Item 4.

c. Attach a USGS map or a color copy of original quality and scale which accurately locates and identifies all known water supply wells and monitor wells within ½-mile of the impoundments.

Attachment: N/A

d. Attach copies of State Water Well Reports (e.g., driller's logs, completion data, etc.), and data on depths to groundwater for all known water supply wells including a description of how the depths to groundwater were obtained.

Attachment: N/A

e. Attach information pertaining to the groundwater, soils, geology, pond liner, etc. used to assess the potential for migration of wastes from the impoundments or the potential for contamination of groundwater or surface water.

Attachment: N/A

Item 4. Outfall/Disposal Method Information (Instructions, Page 42)

Complete the following tables to describe the location and wastewater discharge or disposal operations for each outfall for discharge, and for each point of disposal for TLAP operations.

If there are more outfalls/points of disposal at the facility than the spaces provided, copies of pages 6 and/0r numbered accordingly (i.e., page 6a, 6b, etc.) may be used to provide information on the additional outfalls.

For TLAP applications: Indicate the disposal method and each individual irrigation area **I**, evaporation pond **E**, or subsurface drainage system **S** by providing the appropriate letter designation for the disposal method followed by a numerical designation for each disposal area in the space provided for **Outfall** number (e.g. **E1** for evaporation pond 1, **I2** for irrigation area No. 2, etc.).

Outfall Longitude and Latitude

Outfall No.	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
001	29.849228	-93.985522
101	29.866192	-93.978122
004	29.843892	-93.961967
005A	29.862986	-93.981272
005B	29.862622	-93.981150
005C	29.848561	-93.983456
006	29.839000	-93.978792
008	29.866000	-93.973333
009	Outfall 009 was placed in the permit in 2005 in the event that a concrete batch plant supporting construction activities would be set up on-site. The outfall's location is not fixed and would depend on the location of construction activities. To-date, the facility has never utilized this outfall option.	
010	29.866056	-93.979806
011	29.869083	-93.973897
012	29.870583	-93.971250
013	29.854500	-93.951750
014	29.852667	-93.953472

Outfall Location Description

Outfall No.	Location Description
001	Where the effluent discharges from the tertiary treatment pond prior to entering the JCDD No. 7 Main Outfall Canal and prior to mixing with any other water.
101	After the effluent is discharged from the wastewater treatment facility upstream of where the discharges from Lift Stations 310 and 319 tie into the conveyance pipe that discharges to the tertiary treatment pond.
004	At the monitoring point for the south area surge basin
005A	After leaving the north end of the "Closed Section of Taylors Bayou" and prior to entering the intake canal of JCDD No. 7 Alligator Bayou pump station
005B	After leaving the north end of the "Closed Section of Taylors Bayou" and prior to entering the JCDD No. 7 Main Outfall Canal
005C	At the north end of the Sabine Road Tank Farm, prior to entering the JCDD No. 7 Main Outfall Canal

Outfall No.	Location Description
006	At the south end of the Sabine Road Tank Farm before entering the JCDD No. 7 Main Outfall Canal
008	At Pump Station 452 at the North Tank Farm
009	At the discharge point of stormwater runoff from the concrete batch plant and prior to combining with another stormwater runoff wastestream
010	At the north end of the Sulfur Recovery Unit
011	At the north end of the North Tank Farm
012	At the north end of the North Tank Farm
013	At the south end of Valero-owned property south of West 7th Street and before entering the JCDD No. 7 Foley Outfall Canal
014	At the south end of Valero-owned property south of West 7th Street and before entering the JCDD No. 7 Foley Outfall Canal

Description of Sampling Point(s) (if different from Outfall location)

Outfall No.	Description of sampling point
001, 004, 005A/B/C, 006, 008, 009, 010, 011, 012	Same as outfall location
101	Same as outfall location except different sampling points may be used for TSS and Enterococci. Samples for Enterococci are taken after disinfection.
013	At the south end of the Crude Triangle at South Tank Farm
014	At the drainage area east of 12 Gate near South Tank Farm

Outfall Flow Information – Permitted and Proposed

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	33.0	55.0	33.0	55.0	N/A
101	Variable	Variable	Variable	Variable	N/A
004, 005A/B/C, 006, 008, 009, 010, 011, 012, 013, 014	Intermittent and flow-variable	Intermittent and flow-variable	Intermittent and flow-variable	Intermittent and flow-variable	Intermittent and flow-variable

Outfall Discharge – Method and Measurement

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	N	Y	Ultrasonic flow meter (Parshall flume as backup)
101	Y	N	Ultrasonic flow meter
004, 005A/B/C, 006*, 008, 009	N	Y	Estimate
011, 012, 013**, 014**	Y	N	Estimate

* Outfall 006 – pumping may be used when high runoff volumes result from extreme rain events. Flow estimates would include pumping rates.

** Outfalls 013/014 – The discharge method (pumped or gravity) may change in the final design.

Outfall Discharge – Flow Characteristics

Outfall No.	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	N	Y	N	24	31	12
101	N	Y	N	24	31	12
004, 005A/B/C, 006, 008, 009, 010, 012, 013, 014	Y	N	N	Intermittent and variable	Intermittent and variable	Intermittent and variable

Outfall Wastestream Contributions

Outfall No. All outfalls

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
See Attachment T-1 Facility Description, Table 2 Outfall Wastewaters.		

Attachment: N/A

Item 5. Blowdown and Once-Through Cooling Water Discharges (Instructions, Page 43)

a. Indicate if the facility currently or proposes to:

☒ Yes ☐ No Use cooling towers that discharge blowdown or other wastestreams

☒ Yes ☐ No Use boilers that discharge blowdown or other wastestreams

☐ Yes ☒ No Discharge once-through cooling water

NOTE: If the facility uses or plans to use cooling towers or once-through cooling water, Item 12 **is required**.

b. If **yes** to any of the above, attach an SDS with the following information for each chemical additive.

- Manufacturers Product Identification Number
- Product use (e.g., biocide, fungicide, corrosion inhibitor, etc.)
- Chemical composition including CASRN for each ingredient
- Classify product as non-persistent, persistent, or bioaccumulative
- Product or active ingredient half-life
- Frequency of product use (e.g., 2 hours/day once every two weeks)
- Product toxicity data specific to fish and aquatic invertebrate organisms
- Concentration of whole product or active ingredient, as appropriate, in wastestream.

In addition to each SDS, attach a summary of the above information for each specific wastestream and the associated chemical additives. Specify which outfalls are affected.

Attachment: T-5 Treatment Chemicals and SDSs

c. Cooling Towers and Boilers

If the facility currently or proposes to use cooling towers or boilers that discharge blowdown or other wastestreams to the outfall(s), complete the following table.

Cooling Towers and Boilers

Type of Unit	Number of Units		Daily Avg Blowdown (gallons/day)		Daily Max Blowdown (gallons/day)	
	VPA	DGD	VPA	DGD	VPA	DGD
Cooling Towers	16	1	*	43,200	*	72,000
Boilers	2	-	*	15,600	*	15,600
Heat Recovery Units	46	1				

VPA – Valero Port Arthur Refinery
DGD – Diamond Green Diesel
* All VPA cooling tower blowdown and boiler blowdown are part of the total refinery wastewater and are included as such at 40 CFR 419.

Item 6. Stormwater Management (Instructions, Page 44)

Will any existing/proposed outfalls discharge stormwater associated with industrial activities, as defined at *40 CFR § 122.26(b)(14)*, commingled with any other wastestream?

☒ Yes ☐ No

If **yes**, briefly describe the industrial processes and activities that occur outdoors or in a manner which may result in exposure of the activities or materials to stormwater: See Attachment T-1 Facility Description.

Item 7. Domestic Sewage, Sewage Sludge, and Septage Management and Disposal (Instructions, Page 44)

Domestic Sewage - Waste and wastewater from humans or household operations that is discharged to a wastewater collection system or otherwise enters a treatment works.

a. Check the box next to the appropriate method of domestic sewage and domestic sewage sludge treatment or disposal. Complete Worksheet 5.0 or Item 7.b if directed to do so.

☐ Domestic sewage is routed (i.e., connected to or transported to) to a WWTP permitted to receive domestic sewage for treatment, disposal, or both. Complete Item 7.b.

☐ Domestic sewage disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.

☐ Domestic and industrial treatment sludge ARE commingled prior to use or disposal.

☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge IS NOT commingled prior to sludge use or disposal. Complete Worksheet 5.0.

☐ Facility is a POTW. Complete Worksheet 5.0.

☐ Domestic sewage is not generated on-site.

☒ Other (e.g., portable toilets), specify and Complete Item 7.b: Industrial wastewater and domestic wastewater are commingled prior to treatment on-site. Temporary port-a-potties may be used on-site for construction projects and are managed by the construction contractors.

b. Provide the name and TCEQ, NPDES, or TPDES Permit No. of the waste-disposal facility which receives the domestic sewage/septage. If hauled by motorized vehicle, provide the name and TCEQ Registration No. of the hauler.

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
N/A	

Item 8. Improvements or Compliance/Enforcement Requirements (Instructions, Page 45)

a. Is the permittee currently required to meet any implementation schedule for compliance or enforcement?

☐ Yes ☒ No

b. Has the permittee completed or planned for any improvements or construction projects?

☐ Yes ☒ No

c. If **yes** to either 8.a **or** 8.b, provide a brief summary of the requirements and a status update: N/A

Item 9. Toxicity Testing (Instructions, Page 45)

Have any biological tests for acute or chronic toxicity been made on any of the discharges or on a receiving water in relation to the discharge within the last three years?

☒ Yes ☐ No

If **yes**, identify the tests and describe their purposes: Biomonitoring for Outfall 001 is performed as specified in the current TPDES permit and results have been submitted.

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA. **Attachment:** N/A

Item 10. Off-Site/Third Party Wastes (Instructions, Page 45)

a. Does or will the facility receive wastes from off-site sources for treatment at the facility, disposal on-site via land application, or discharge via a permitted outfall?

☒ Yes ☐ No

If **yes**, provide responses to Items 10.b through 10.d below.

If **no**, proceed to Item 11.

b. Attach the following information to the application:

- List of wastes received (including volumes, characterization, and capability with on-site wastes).
- Identify the sources of wastes received (including the legal name and addresses of the generators).
- Description of the relationship of waste source(s) with the facility's activities.

Attachment: T-1 Facility Description, Table 3 Third Party Wastes

c. Is or will wastewater from another TCEQ, NPDES, or TPDES permitted facility commingled with this facility's wastewater after final treatment and prior to discharge via the final outfall/point of disposal?

☐ Yes ☒ No

If **yes**, provide the name, address, and TCEQ, NPDES, or TPDES permit number of the contributing facility and a copy of any agreements or contracts relating to this activity.

Attachment: N/A

d. Is this facility a POTW that accepts/will accept process wastewater from any SIU and has/is required to have an approved pretreatment program under the NPDES/TPDES program?

☐ Yes ☒ No

If **yes**, **Worksheet 6.0** of this application **is required**.

Item 11. Radioactive Materials (Instructions, Page 46)

a. Are/will radioactive materials be mined, used, stored, or processed at this facility?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L.

Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material Name	Concentration (pCi/L)
Valero utilizes nuclear gauges that house sealed sources containing radioactive material. The nuclear gauges are mounted external to the equipment to which they are dedicated, and are managed and inspected by the on-site Radiation Safety Officer per Valero's Radiation Control Program. The sealed sources do not come in contact with wastewater generated at the facility.	

b. Does the applicant or anyone at the facility have any knowledge or reason to believe that radioactive materials may be present in the discharge, including naturally occurring radioactive materials in the source waters or on the facility property?

☒ Yes ☐ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L. Do not include information provided in response to Item 11.a.

Radioactive Materials Present in the Discharge

Radioactive Material Name	Concentration (pCi/L)
Crude oil can contain naturally occurring radioactive materials (NORM). Changes in temperature or pressure during the refining process of crude oil can promote the accumulation of NORM on or within various components of the process equipment. Affected surface equipment may include water separators and crude oil storage units. NORM may be in the form of scale or sludge. NORM can also be found in the gas production pipelines and equipment in the process of cracking low molecular weight hydrocarbon gases from crude oil. Common locations for NORM in the refinery are the desalters, associated heat exchangers, and crude unit equipment.	N/A

Item 12. Cooling Water (Instructions, Page 46)

a. Does the facility use or propose to use water for cooling purposes?

☒ Yes ☐ No

If **no**, stop here. If **yes**, complete Items 12.b thru 12.f.

b. Cooling water is/will be obtained from a groundwater source (e.g., on-site well).

☐ Yes ☒ No

If **yes**, stop here. If **no**, continue.

c. Cooling Water Supplier

1. Provide the name of the owner(s) and operator(s) for the CWIS that supplies or will supply water for cooling purposes to the facility.

Cooling Water Intake Structure(s) Owner(s) and Operator(s)

CWIS ID	S0360112A (Neches River)	Fire Water Intake (Alligator Bayou)
Owner	-	The Premcor Refining Group Inc.
Operator	Lower Neches Valley Authority	The Premcor Refining Group Inc.
Information for LNVA was obtained from the TCEQ's Public Water Supply (PWS) database. Item 12.c.2 below is completed in regard to LNVA. Items 12.c.3-4 and 12.d are completed in regard to the fire water intake. For additional detail, see Attachment T-1 Facility Description (Water Supply).		

2. Cooling water is/will be obtained from a Public Water Supplier (PWS)

☒ Yes ☐ No

If **no**, continue. If **yes**, provide the PWS Registration No. and stop here: PWS No. TX0360112 (LNVA)

3. Cooling water is/will be obtained from a reclaimed water source?

☐ Yes ☒ No

If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here: N/A

4. Cooling water is/will be obtained from an Independent Supplier

☐ Yes ☒ No

If **no**, proceed to Item 12.d. If **yes**, provide the actual intake flow of the Independent Supplier's CWIS that is/will be used to provide water for cooling purposes and proceed: N/A

d. 316(b) General Criteria

1. The CWIS(s) used to provide water for cooling purposes to the facility has or will have a cumulative design intake flow of 2 MGD or greater.

☒ Yes ☐ No

2. At least 25% of the total water withdrawn by the CWIS is/will be used at the facility exclusively for cooling purposes on an annual average basis.

   ☐ Yes ☒ No

3. The CWIS(s) withdraw(s)/propose(s) to withdraw water for cooling purposes from surface waters that meet the definition of Waters of the United States in *40 CFR § 122.2*.

   ☒ Yes ☐ No

   If **no**, provide an explanation of how the waterbody does not meet the definition of Waters of the United States in *40 CFR § 122.2*: N/A

If **yes** to all three questions in Item 12.d, the facility **meets** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA. Proceed to **Item 12.f**.

If **no** to any of the questions in Item 12.d, the facility **does not meet** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA; however, a determination is required based upon BPJ. Proceed to **Item 12.e**.

e. The facility does not meet the minimum requirements to be subject to the fill requirements of Section 316(b) **and uses**/proposes **to use cooling towers**.

   ☒ Yes ☐ No

   If **yes**, stop here. If **no**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ.

f. Oil and Gas Exploration and Production

   1. The facility is subject to requirements at 40 CFR Part 435, Subparts A or D.

      ☐ Yes ☐ No

      If **yes**, continue. If **no**, skip to Item 12.g.

   2. The facility is an existing facility as defined at 40 CFR § 125.92(k) or a new unit at an existing facility as defined at 40 CFR § 125.92(u).

      ☐ Yes ☐ No

      If **yes**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ. If **no**, skip to Item 12.g.3.

g. Compliance Phase and Track Selection

   1. Phase I – New facility subject to 40 CFR Part 125, Subpart I

      ☐ Yes ☐ No

      If **yes**, check the box next to the compliance track selection, attach the requested information, and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.

      ☐ Track I – AIF greater than 2 MGD, but less than 10 MGD

      - Attach information required by *40 CFR §§ 125.86(b)(2)-(4)*.

      ☐ Track I – AIF greater than 10 MGD

- Attach information required by *40 CFR § 125.86(b)*.

☐ Track II

- Attach information required by *40 CFR § 125.86(c)*.

Attachment: N/A

2. Phase II – Existing facility subject to 40 CFR Part 125, Subpart J

   ☐ Yes ☐ No

   If **yes**, complete Worksheets 11.0 through 11.3, as applicable.

3. Phase III – New facility subject to 40 CFR Part 125, Subpart N

   ☐ Yes ☐ No

   If **yes**, check the box next to the compliance track selection and provide the requested information.

   ☐ Track I – Fixed facility

   - Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.

   ☐ Track I – Not a fixed facility

   - Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Item 2 (except CWIS latitude/longitude under Item 2.a).

   ☐ Track II – Fixed facility

   - Attach information required by 40 CFR § 125.136(c) and complete Worksheet 11.0, Items 2 and 3.

   Attachment: N/A

Item 13. Permit Change Requests (Instructions, Page 48)

This item is only applicable to existing permitted facilities.

a. Is the facility requesting a **major amendment** of an existing permit?

☐ Yes ☒ No

If **yes**, list each request individually and provide the following information: 1) detailed information regarding the scope of each request and 2) a justification for each request. Attach any supplemental information or additional data to support each request.

N/A

b. Is the facility requesting any **minor amendments** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

N/A

c. Is the facility requesting any **minor modifications** to the permit?

☐ Yes ☒ No

If **yes**, list and describe each change individually.

N/A

Item 14. Laboratory Accreditation (Instructions, Page 49)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
  - periodically inspected by the TCEQ; or
  - located in another state and is accredited or inspected by that state; or
  - performing work for another company with a unit located in the same site; or
  - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review *30 TAC Chapter 25* for specific requirements.

The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.*

Printed Name: Jerry Stumbo

Title: Vice President and General Manager

Signature: Jerry Stumbo

Date: 07/31/2024

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 1.0: EPA CATEGORICAL EFFLUENT GUIDELINES

This worksheet **is required** for all applications for TPDES permits for discharges of wastewaters subject to EPA categorical effluent limitation guidelines (ELGs).

Item 1. Categorical Industries (Instructions, Page 53)

Is this facility subject to any 40 CFR categorical ELGs outlined on page 53 of the instructions?

☒ Yes ☐ No

If **no**, this worksheet is not required. If **yes**, provide the appropriate information below.

40 CFR Effluent Guideline

Industry	40 CFR Part
Petroleum Refining	419

Item 2. Production/Process Data (Instructions, Page 54)

NOTE: For all TPDES permit applications requesting individual permit coverage for discharges of oil and gas exploration and production wastewater (discharges into or adjacent to water in the state, falling under the Oil and Gas Extraction Effluent Guidelines – 40 CFR Part 435), see Worksheet 12.0, Item 2 instead.

a. Production Data

Provide appropriate data for effluent guidelines with production-based effluent limitations.

Production Data

Subcategory	Actual Quantity/Day	Design Quantity/Day	Units
See Attachment T-1 Facility Description, Table 4 Refining Production Levels.			

b. Organic Chemicals, Plastics, and Synthetic Fibers Manufacturing Data (40 CFR Part 414)

Provide each applicable subpart and the percent of total production. Provide data for metal-bearing and cyanide-bearing wastestreams, as required by *40 CFR Part 414, Appendices A and B*.

Percentage of Total Production

Subcategory	Percent of Total Production	Appendix A and B - Metals	Appendix A - Cyanide
N/A			

c. Refineries (40 CFR Part 419)

Provide the applicable subcategory and a brief justification.

40 CFR 419, Subpart C, Petrochemical – petroleum refining with petrochemical operations.

Item 3. Process/Non-Process Wastewater Flows (Instructions, Page 54)

Provide a breakdown of wastewater flow(s) generated by the facility, including both process and non-process wastewater flow(s). Specify which wastewater flows are to be authorized for discharge under this permit and the disposal practices for wastewater flows, excluding domestic, which are not to be authorized for discharge under this permit.

See Attachment T-1 Facility Description, Table 2 Outfall Wastewaters.

Item 4. New Source Determination (Instructions, Page 54)

Provide a list of all wastewater-generating processes subject to EPA categorical ELGs, identify the appropriate guideline Part and Subpart, and provide the date the process/construction commenced.

Wastewater Generating Processes Subject to Effluent Guidelines

Process	EPA Guideline Part	EPA Guideline Subpart	Date Process/ Construction Commenced
Desalting	419	C	10-30-82
Atmospheric distillation	419	C	10-30-82
Vacuum distillation	419	C	10-30-82
Fluid catalytic cracking	419	C	5-16-78
Hydrorefining	419	C	12-22-82
Catalytic reforming	419	C	10-13-80

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: POLLUTANT ANALYSIS

Worksheet 2.0 **is required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

Item 1. General Testing Requirements (Instructions, Page 55)

a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): June 4 – July 1, 2024

Note: Outfalls 005B and 005C were not used during the sampling period (Outfall 005A was sampled). Samples were not collected for Outfalls 011 and 012 because they did not discharge during the sampling period. Outfalls 006, 008, 013, and 014 have not been constructed.

b. ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.

c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm. **Attachment:** W2-1 Analytical Laboratories

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** N/A

TABLE 1 and TABLE 2 (Instructions, Page 58)

Completion of Tables 1 and 2 is required for all external outfalls for all TPDES permit applications.

Table 1 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☒ Grab**

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
	4-Jun-24	11-Jun-24	18-Jun-24	25-Jun-24
BOD (5-day)	7.	8.8	8.2	12.
CBOD (5-day)	5.6	5.	4.6	6.6
Chemical oxygen demand	102.	127.	95.	139.
Total organic carbon	22.8	23.	24.	25.3
Dissolved oxygen	5.1	4.1	4.2	7.9
Ammonia nitrogen	<2.	<0.2	<0.2	<0.2
Total suspended solids	45.	36.	42.	56.
Nitrate nitrogen	0.27	<0.2	<0.2	<0.2
Total organic nitrogen	4.88	4.57	6.03	5.97
Total phosphorus	0.88	0.86	0.88	0.8
Oil and grease	<2.2	<2.3	<2.3	<2.3
Total residual chlorine	<0.02	0.02	<0.02	0.02
Total dissolved solids	1180.	1020.	980.	1000.

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Sulfate	237.	230.	192.	194.
Chloride	302.	297.	294.	284.
Fluoride	0.46	0.66	0.45	0.53
Total alkalinity (mg/L as CaCO3)	298.	335.	260.	250.
Temperature (°F)	85.8	88.2	84.	94.6
pH (standard units)	7.7	7.3	7.7	7.5
Note: Field tests were conducted for dissolved oxygen, total residual chlorine, temperature, and pH and are not part of the accredited analyses.				

Table 2 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
	4-Jun-24	11-Jun-24	18-Jun-24	25-Jun-24	
Aluminum, total	102.	60.2	105.	123.	2.5
Antimony, total	<5.	<5.	<5.	<5.	5
Arsenic, total	3.14	3.17	3.09	3.41	0.5
Barium, total	87.5	93.4	99.	98.7	3
Beryllium, total	<0.5	<0.5	<0.5	<0.5	0.5
Cadmium, total	<1.	<1.	<1.	<1.	1
Chromium, total	<3.	<3.	<3.	<3.	3
Chromium, hexavalent	<3.	<3.	<3.	<3.	3
Chromium, trivalent	<3.	<3.	<3.	<3.	N/A
Copper, total	<2.	<2.	<2.	<2.	2
Cyanide, available	1.6	<1.6	<1.6	<5	2/10
Lead, total	1.54	0.72	0.95	1.12	0.5
Mercury, total	0.00417	0.00369	0.00748	0.00371	0.005/0.0005
Nickel, total	2.22	2.12	<2.	<2.	2
Selenium, total	47.7	38.6	41.1	60.8	5
Silver, total	<0.5	<0.5	<0.5	<0.5	0.5
Thallium, total	<0.5	<0.5	<0.5	<0.5	0.5
Zinc, total	<5.	<5.	<5.	<5.	5.0

TABLE 3 (Instructions, Page 58)

Completion of Table 3 **is required** for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 **is required** for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
	4-Jun-24	11-Jun-24	18-Jun-24	25-Jun-24	
Acrylonitrile	<20.	<20.	<20.	<20.	50
Anthracene	<5.	<5.	<5.	<5.	10
Benzene	<5.	<5.	<5.	<5.	10
Benzidine	<5.	<5.	<5.	<5.	50
Benzo(a)anthracene	<5.	<5.	<5.	<5.	5
Benzo(a)pyrene	<5.	<5.	<5.	<5.	5

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Bis(2-chloroethyl)ether	<5.	<5.	<5.	<5.	10
Bis(2-ethylhexyl)phthalate	<5.	<5.	<5.	<5.	10
Bromodichloromethane [Dichlorobromomethane]	<5.	<5.	<5.	<5.	10
Bromoform	<5.	<5.	<5.	<5.	10
Carbon tetrachloride	<2.	<2.	<2.	<2.	2
Chlorobenzene	<5.	<5.	<5.	<5.	10
Chlorodibromomethane [Dibromochloromethane]	<5.	<5.	<5.	<5.	10
Chloroform	<4.	<4.	<4.	<4.	10
Chrysene	<5.	<5.	<5.	<5.	5
m-Cresol [3-Methylphenol]	<5.	<5.	<5.	<5.	10
o-Cresol [2-Methylphenol]	<5.	<5.	<5.	<5.	10
p-Cresol [4-Methylphenol]	<5.	<5.	<5.	<5.	10
1,2-Dibromoethane	<5.	<5.	<5.	<5.	10
m-Dichlorobenzene [1,3-Dichlorobenzene]	<5.	<5.	<5.	<5.	10
o-Dichlorobenzene [1,2-Dichlorobenzene]	<5.	<5.	<5.	<5.	10
p-Dichlorobenzene [1,4-Dichlorobenzene]	<5.	<5.	<5.	<5.	10
3,3'-Dichlorobenzidine	<5.	<5.	<5.	<5.	5
1,2-Dichloroethane	<5.	<5.	<5.	<5.	10
1,1-Dichloroethene [1,1-Dichloroethylene]	<5.	<5.	<5.	<5.	10
Dichloromethane [Methylene chloride]	<5.	<5.	<5.	<5.	20
1,2-Dichloropropane	<5.	<5.	<5.	<5.	10
1,3-Dichloropropene [1,3-Dichloropropylene]	<5.	<5.	<5.	<5.	10
2,4-Dimethylphenol	<5.	<5.	<5.	<5.	10
Di-n-Butyl phthalate	<5.	<5.	<5.	<5.	10
Ethylbenzene	<5.	<5.	<5.	<5.	10
Fluoride	460.	660.	450.	530.	500
Hexachlorobenzene	<5.	<5.	<5.	<5.	5
Hexachlorobutadiene	<2.	<2.	<2.	<2.	10
Hexachlorocyclopentadiene	<5.	<5.	<5.	<5.	10
Hexachloroethane	<2.	<2.	<2.	<2.	20
Methyl ethyl ketone	<5.	<5.	<5.	<5.	50
Nitrobenzene	<5.	<5.	<5.	<5.	10
N-Nitrosodiethylamine	<5.	<5.	<5.	<5.	20
N-Nitroso-di-n-butylamine	<5.	<5.	<5.	<5.	20
Nonylphenol	<5.	<5.	<5.	<5.	333
Pentachlorobenzene	<5.	<5.	<5.	<5.	20
Pentachlorophenol	<5.	<5.	<5.	<5.	5
Phenanthrene	<5.	<5.	<5.	<5.	10
Polychlorinated biphenyls (PCBs) (**)	<0.1	<0.1	<0.1	<0.1	0.2
Pyridine	<5.	<5.	<5.	<5.	20
1,2,4,5-Tetrachlorobenzene	<5.	<5.	<5.	<5.	20

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
1,1,2,2-Tetrachloroethane	<5.	<5.	<5.	<5.	10
Tetrachloroethene [Tetrachloroethylene]	<5.	<5.	<5.	<5.	10
Toluene	<5.	<5.	<5.	<5.	10
1,1,1-Trichloroethane	<5.	<5.	<5.	<5.	10
1,1,2-Trichloroethane	<5.	<5.	<5.	<5.	10
Trichloroethene [Trichloroethylene]	<5.	<5.	<5.	<5.	10
2,4,5-Trichlorophenol	<5.	<5.	<5.	<5.	50
TTHM (Total trihalomethanes)	<5.	<5.	<5.	<5.	10
Vinyl chloride	<5.	<5.	<5.	<5.	10

(*) Indicate units if different from µg/L.

(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

TABLE 4 (Instructions, Pages 58-59)

Partial completion of Table 4 **is required** for each **external outfall** based on the conditions below.

a. **Tributyltin**

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

☐ Yes ☒ No

If **yes**, check the box next to each of the following criteria which apply and provide the appropriate testing results in Table 4 below (check all that apply).

☐ Manufacturers and formulators of tributyltin or related compounds.

☐ Painting of ships, boats and marine structures.

☐ Ship and boat building and repairing.

☐ Ship and boat cleaning, salvage, wrecking and scaling.

☐ Operation and maintenance of marine cargo handling facilities and marinas.

☐ Facilities engaged in wood preserving.

☐ Any other industrial/commercial facility for which tributyltin is known to be present, or for which there is any reason to believe that tributyltin may be present in the effluent.

b. **Enterococci (discharge to saltwater)**

This facility discharges/proposes to discharge directly into saltwater receiving waters **and** Enterococci bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☒ Yes ☐ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

c. E. coli (discharge to freshwater)

This facility discharges/proposes to discharge directly into freshwater receiving waters **and** *E. coli* bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☒ Yes ☐ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

Table 4 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)	N/A	N/A	N/A	N/A	0.010
Enterococci (cfu or MPN/100 mL)	Measured at internal Outfall 101 per TPDES permit				N/A
E. coli (cfu or MPN/100 mL)	N/A	N/A	N/A	N/A	N/A

TABLE 5 (Instructions, Page 59)

Completion of Table 5 **is required** for all **external outfalls** which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters that may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (*alpha*)					0.01
Endosulfan II (*beta*)					0.02
Endosulfan sulfate					0.1
Endrin					0.02

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (*alpha*)					0.05
Hexachlorocyclohexane (*beta*)					0.05
Hexachlorocyclohexane (*gamma*) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 **is required** for all **external outfalls**.

Table 6 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☒ Grab**

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (µg/L)*
			4-Jun-24				
Bromide	☒	☐	1.29	-	-	-	400
Color (PCU)	☒	☐	-	-	-	-	—
Nitrate-Nitrite (as N)	☒	☐	<0.4	-	-	-	—
Sulfide (as S)	☒	☐	0.011	-	-	-	—
Sulfite (as SO3)	☐	☒	<2.	-	-	-	—
Surfactants	☒	☐	0.19	-	-	-	—
Boron, total	☒	☐	0.556	-	-	-	20
Cobalt, total	☐	☒	<0.0003	-	-	-	0.3
Iron, total	☒	☐	0.117	-	-	-	7
Magnesium, total	☒	☐	7.25	-	-	-	20
Manganese, total	☒	☐	0.0593	-	-	-	0.5
Molybdenum, total	☒	☐	0.0123	-	-	-	1
Tin, total	☐	☒	<0.005	-	-	-	5
Titanium, total	☐	☒	<0.005	-	-	-	30
Note: Field test was conducted for sulfite and is not part of the accredited analyses.							

TABLE 7 (Instructions, Page 60)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

☐ N/A

Table 7 for Applicable Industrial Categories

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/ Neutrals Table 10	Pesticides Table 11
☐ Adhesives and Sealants		☐ Yes	☐ Yes	☐ Yes	No
☐ Aluminum Forming	467	☐ Yes	☐ Yes	☐ Yes	No
☐ Auto and Other Laundries		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Battery Manufacturing	461	☐ Yes	No	☐ Yes	No
☐ Coal Mining	434	No	No	No	No
☐ Coil Coating	465	☐ Yes	☐ Yes	☐ Yes	No
☐ Copper Forming	468	☐ Yes	☐ Yes	☐ Yes	No
☐ Electric and Electronic Components	469	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Electroplating	413	☐ Yes	☐ Yes	☐ Yes	No
☐ Explosives Manufacturing	457	No	☐ Yes	☐ Yes	No
☐ Foundries		☐ Yes	☐ Yes	☐ Yes	No
☐ Gum and Wood Chemicals - Subparts A,B,C,E	454	☐ Yes	☐ Yes	No	No
☐ Gum and Wood Chemicals - Subparts D,F	454	☐ Yes	☐ Yes	☐ Yes	No
☐ Inorganic Chemicals Manufacturing	415	☐ Yes	☐ Yes	☐ Yes	No
☐ Iron and Steel Manufacturing	420	☐ Yes	☐ Yes	☐ Yes	No
☐ Leather Tanning and Finishing	425	☐ Yes	☐ Yes	☐ Yes	No
☐ Mechanical Products Manufacturing		☐ Yes	☐ Yes	☐ Yes	No
☐ Nonferrous Metals Manufacturing	421,471	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Oil and Gas Extraction - Subparts A, D, E, F, G, H	435	☐ Yes	☐ Yes	☐ Yes	No
☐ Ore Mining - Subpart B	440	No	☐ Yes	No	No
☐ Organic Chemicals Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Paint and Ink Formulation	446,447	☐ Yes	☐ Yes	☐ Yes	No
☐ Pesticides	455	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☒ Petroleum Refining	419	☒ Yes	No	No	No
☐ Pharmaceutical Preparations	439	☐ Yes	☐ Yes	☐ Yes	No
☐ Photographic Equipment and Supplies	459	☐ Yes	☐ Yes	☐ Yes	No
☐ Plastic and Synthetic Materials Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Plastic Processing	463	☐ Yes	No	No	No
☐ Porcelain Enameling	466	No	No	No	No
☐ Printing and Publishing		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Pulp and Paperboard Mills - Subpart C	430	☐ *	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subparts F, K	430	☐ *	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts A, B, D, G, H	430	☐ Yes	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts I, J, L	430	☐ Yes	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subpart E	430	☐ Yes	☐ Yes	☐ Yes	☐ *
☐ Rubber Processing	428	☐ Yes	☐ Yes	☐ Yes	No
☐ Soap and Detergent Manufacturing	417	☐ Yes	☐ Yes	☐ Yes	No
☐ Steam Electric Power Plants	423	☐ Yes	☐ Yes	No	No
☐ Textile Mills (Not Subpart C)	410	☐ Yes	☐ Yes	☐ Yes	No
☐ Timber Products Processing	429	☐ Yes	☐ Yes	☐ Yes	☐ Yes

* Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 60)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: 001 **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
	4-Jun-24	11-Jun-24	18-Jun-24	25-Jun-24	
Acrolein	<20.	<20.	<20.	<20.	50
Acrylonitrile	<20.	<20.	<20.	<20.	50
Benzene	<5.	<5.	<5.	<5.	10
Bromoform	<5.	<5.	<5.	<5.	10
Carbon tetrachloride	<2.	<2.	<2.	<2.	2
Chlorobenzene	<5.	<5.	<5.	<5.	10
Chlorodibromomethane	<5.	<5.	<5.	<5.	10
Chloroethane	<5.	<5.	<5.	<5.	50
2-Chloroethylvinyl ether	<5.	<5.	<5.	<5.	10
Chloroform	<4.	<4.	<4.	<4.	10
Dichlorobromomethane [Bromodichloromethane]	<5.	<5.	<5.	<5.	10
1,1-Dichloroethane	<5.	<5.	<5.	<5.	10
1,2-Dichloroethane	<5.	<5.	<5.	<5.	10
1,1-Dichloroethylene [1,1-Dichloroethene]	<5.	<5.	<5.	<5.	10
1,2-Dichloropropane	<5.	<5.	<5.	<5.	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<5.	<5.	<5.	<5.	10
Ethylbenzene	<5.	<5.	<5.	<5.	10
Methyl bromide [Bromomethane]	<5.	<5.	<5.	<5.	50
Methyl chloride [Chloromethane]	<5.	<5.	<5.	<5.	50
Methylene chloride [Dichloromethane]	<5.	<5.	<5.	<5.	20
1,1,2,2-Tetrachloroethane	<5.	<5.	<5.	<5.	10
Tetrachloroethylene [Tetrachloroethene]	<5.	<5.	<5.	<5.	10
Toluene	<5.	<5.	<5.	<5.	10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]	<4.	<4.	<4.	<4.	10
1,1,1-Trichloroethane	<5.	<5.	<5.	<5.	10
1,1,2-Trichloroethane	<5.	<5.	<5.	<5.	10
Trichloroethylene [Trichloroethene]	<5.	<5.	<5.	<5.	10
Vinyl chloride	<5.	<5.	<5.	<5.	10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☐ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
	4-Jun-24	11-Jun-24	18-Jun-24	25-Jun-24	
2-Chlorophenol	<5.	<5.	<5.	<5.	10
2,4-Dichlorophenol	<5.	<5.	<5.	<5.	10
2,4-Dimethylphenol	<5.	<5.	<5.	<5.	10
4,6-Dinitro-o-cresol	<10.	<10.	<10.	<10.	50
2,4-Dinitrophenol	<10.	<10.	<10.	<10.	50
2-Nitrophenol	<5.	<5.	<5.	<5.	20
4-Nitrophenol	<10.	<10.	<10.	<10.	50
p-Chloro-m-cresol	<5.	<5.	<5.	<5.	10
Pentachlorophenol	<5.	<5.	<5.	<5.	5
Phenol	<2.	<2.	<2.	<2.	10
2,4,6-Trichlorophenol	<5.	<5.	<5.	<5.	10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☐ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
	4-Jun-24	11-Jun-24	18-Jun-24	25-Jun-24	
Acenaphthene	<5.	<5.	<5.	<5.	10
Acenaphthylene	<5.	<5.	<5.	<5.	10
Anthracene	<5.	<5.	<5.	<5.	10
Benzidine	<5.	<5.	<5.	<5.	50
Benzo(a)anthracene	<5.	<5.	<5.	<5.	5
Benzo(a)pyrene	<5.	<5.	<5.	<5.	5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]	<5.	<5.	<5.	<5.	10
Benzo(ghi)perylene	<5.	<5.	<5.	<5.	20
Benzo(k)fluoranthene	<5.	<5.	<5.	<5.	5
Bis(2-chloroethoxy)methane	<5.	<5.	<5.	<5.	10
Bis(2-chloroethyl)ether	<5.	<5.	<5.	<5.	10
Bis(2-chloroisopropyl)ether	<5.	<5.	<5.	<5.	10
Bis(2-ethylhexyl)phthalate	<5.	<5.	<5.	<5.	10
4-Bromophenyl phenyl ether	<5.	<5.	<5.	<5.	10
Butylbenzyl phthalate	<5.	<5.	<5.	<5.	10
2-Chloronaphthalene	<5.	<5.	<5.	<5.	10
4-Chlorophenyl phenyl ether	<5.	<5.	<5.	<5.	10
Chrysene	<5.	<5.	<5.	<5.	5
Dibenzo(a,h)anthracene	<5.	<5.	<5.	<5.	5
1,2-Dichlorobenzene [o-Dichlorobenzene]	<5.	<5.	<5.	<5.	10
1,3-Dichlorobenzene [m-Dichlorobenzene]	<5.	<5.	<5.	<5.	10
1,4-Dichlorobenzene [p-Dichlorobenzene]	<5.	<5.	<5.	<5.	10
3,3'-Dichlorobenzidine	<5.	<5.	<5.	<5.	5
Diethyl phthalate	<5.	<5.	<5.	<5.	10
Dimethyl phthalate	<2.	<2.	<2.	<2.	10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Di-n-butyl phthalate	<5.	<5.	<5.	<5.	10
2,4-Dinitrotoluene	<5.	<5.	<5.	<5.	10
2,6-Dinitrotoluene	<5.	<5.	<5.	<5.	10
Di-n-octyl phthalate	<5.	<5.	<5.	<5.	10
1,2-Diphenylhydrazine (as Azobenzene)	<5.	<5.	<5.	<5.	20
Fluoranthene	<5.	<5.	<5.	<5.	10
Fluorene	<5.	<5.	<5.	<5.	10
Hexachlorobenzene	<5.	<5.	<5.	<5.	5
Hexachlorobutadiene	<2.	<2.	<2.	<2.	10
Hexachlorocyclopentadiene	<5.	<5.	<5.	<5.	10
Hexachloroethane	<2.	<2.	<2.	<2.	20
Indeno(1,2,3-cd)pyrene	<5.	<5.	<5.	<5.	5
Isophorone	<5.	<5.	<5.	<5.	10
Naphthalene	<2.	<2.	<2.	<2.	10
Nitrobenzene	<5.	<5.	<5.	<5.	10
N-Nitrosodimethylamine	<5.	<5.	<5.	<5.	50
N-Nitrosodi-n-propylamine	<5.	<5.	<5.	<5.	20
N-Nitrosodiphenylamine	<5.	<5.	<5.	<5.	20
Phenanthrene	<5.	<5.	<5.	<5.	10
Pyrene	<5.	<5.	<5.	<5.	10
1,2,4-Trichlorobenzene	<5.	<5.	<5.	<5.	10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☐ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
	4-Jun-24	11-Jun-24	18-Jun-24	25-Jun-24	
Aldrin	-	-	-	-	0.01
alpha-BHC [alpha-Hexachlorocyclohexane]	-	-	-	-	0.05
beta-BHC [beta-Hexachlorocyclohexane]	-	-	-	-	0.05
gamma-BHC [gamma-Hexachlorocyclohexane]	-	-	-	-	0.05
delta-BHC [delta-Hexachlorocyclohexane]	-	-	-	-	0.05
Chlordane	-	-	-	-	0.2
4,4'-DDT	-	-	-	-	0.02
4,4'-DDE	-	-	-	-	0.1
4,4'-DDD	-	-	-	-	0.1
Dieldrin	-	-	-	-	0.02
Endosulfan I (alpha)	-	-	-	-	0.01
Endosulfan II (beta)	-	-	-	-	0.02
Endosulfan sulfate	-	-	-	-	0.1
Endrin	-	-	-	-	0.02
Endrin aldehyde	-	-	-	-	0.1
Heptachlor	-	-	-	-	0.01
Heptachlor epoxide	-	-	-	-	0.01
PCB 1242	<0.1	<0.1	<0.1	<0.1	0.2

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
PCB 1254	<0.1	<0.1	<0.1	<0.1	0.2
PCB 1221	<0.1	<0.1	<0.1	<0.1	0.2
PCB 1232	<0.1	<0.1	<0.1	<0.1	0.2
PCB 1248	<0.1	<0.1	<0.1	<0.1	0.2
PCB 1260	<0.1	<0.1	<0.1	<0.1	0.2
PCB 1016	<0.1	<0.1	<0.1	<0.1	0.2
Toxaphene	-	-	-	-	0.3

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

☐ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) CASRN 299-84-3

☐ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4

☐ hexachlorophene (HCP) CASRN 70-30-4

☒ None of the above

Description: N/A

Does the applicant or anyone at the facility know or have any reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) or any congeners of TCDD may be present in the effluent proposed for discharge?

☒ Yes ☐ No

Description: The petroleum refinery has a catalytic reforming unit. Regeneration of these units may generate small quantities of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: 001 **Samples are (check one):** ☐ **Composite** ☒ **Grab**

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1	<4.95	0	<0.00509	0	10
1,2,3,7,8-PeCDD	1.0	<24.8	0	0.00239 J	0.00239	50
2,3,7,8-HxCDDs	0.1	2.55	0.255	0.03414	0.003414	50

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
1,2,3,4,6,7,8-HpCDD	0.01	2.57 JK	0.0257	0.209	0.00209	50
2,3,7,8-TCDF	0.1	<4.95	0	<0.00509	0	10
1,2,3,7,8-PeCDF	0.03	<24.8	0	<0.0254	0	50
2,3,4,7,8-PeCDF	0.3	<24.8	0	<0.0254	0	50
2,3,7,8-HxCDFs	0.1	<24.8	0	0.01516	0.001516	50
2,3,4,7,8-HpCDFs	0.01	2.8	0.028	0.0479	0.000479	50
OCDD	0.0003	14.4 BJ	0.00432	1.42	0.000426	100
OCDF	0.0003	14.3 JK	0.00429	0.147	0.0000441	100
PCB 77	0.0001	<1.4	0	0.041 JR	0.0000041	500
PCB 81	0.0003	<1.3	0	<0.017	0	500
PCB 126	0.1	<1.7	0	<0.017	0	500
PCB 169	0.03	<1.2	0	<0.016	0	500
Total			0.317		0.0104	

Notes
Sludge was analyzed as a water matrix.
B Found in method blank at >1/10th reported value
J Estimated value. Reported concentration is below the method reporting limit.
K Ion abundance ratio between primary/secondary ions outside of theoretical acceptance limits. Estimated value.
JR Detected below calibrated range but above EDL and ion abundance ratios did not meet acceptance criteria. Estimated maximum value.

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

☒ Yes ☐ No

Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

☐ Yes ☒ No

If **yes** to either Items a **or** b, complete Table 13 as instructed.

Table 13 for Outfall No.: 001 **Samples are (check one): ☒ Composite ☒ Grab**

Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method
		6/4/24	6/11/24	6/18/24	6/25/24	
Cyclohexane	110-82-7	<5	<5	<5	<5	624.1
Vanadium, total	7440-62-2	10.	-	-	-	200.8
Xylenes (o/m/p)	1330-20-7	<5.	<5.	<5.	<5.	624.1

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: POLLUTANT ANALYSIS

Worksheet 2.0 **is required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

Item 1. General Testing Requirements (Instructions, Page 55)

a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): June 4 – July 1, 2024

b. ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.

c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm. **Attachment:** W2-1 Analytical Laboratories

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** N/A

TABLE 1 and TABLE 2 (Instructions, Page 58)

Completion of Tables 1 and 2 is required for all external outfalls for all TPDES permit applications.

Table 1 for Outfall No.: See below **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	**Sample 1 (mg/L)**	**Sample 1 (mg/L)**	**Sample 1 (mg/L)**	
	Outfall 004	Outfall 005A	Outfall 010	
	1-Jul-24	4-Jun-24	1-Jul-24	
BOD (5-day)	3.6	8.4	10.	
CBOD (5-day)	2.3	7.4	9.5	
Chemical oxygen demand	75.	75.	120.	
Total organic carbon	9.06	19.9	10.4	
Dissolved oxygen	4.4	1.	4.2	
Ammonia nitrogen	<0.2	2.42	<0.2	
Total suspended solids	149.	30.	105.	
Nitrate nitrogen	<0.2	<0.2	0.52	
Total organic nitrogen	1.65	2.17	40.	
Total phosphorus	0.28	0.46	0.4	
Oil and grease	<2.2	<2.5	<2.2	
Total residual chlorine	<0.02	<0.02	<0.02	
Total dissolved solids	148.	864.	136.	
Sulfate	26.3	360.	44.3	

Pollutant	Sample 1 (mg/L)	Sample 1 (mg/L)	Sample 1 (mg/L)	
Chloride	61.	69.	45.	
Fluoride	0.13	0.24	<0.1	
Total alkalinity (mg/L as CaCO3)	135.	135.	141.	
Temperature (°F)	84.9	87.1	82.8	
pH (standard units)	7.3	7.3	7.7	
Note: Field tests were conducted for dissolved oxygen, total residual chlorine, temperature, and pH and are not part of the accredited analyses.				

Table 2 for Outfall No.: See below **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)	Sample 1 (µg/L)	Sample 1 (µg/L)		MAL (µg/L)
	Outfall 004	Outfall 005A	Outfall 010		
	1-Jul-24	4-Jun-24	1-Jul-24		
Aluminum, total	1010.	268.	2600.		2.5
Antimony, total	<5.	<5.	<5.		5
Arsenic, total	3.09	2.56	4.2		0.5
Barium, total	48.7	59.6	38.4		3
Beryllium, total	<0.5	<0.5	<0.5		0.5
Cadmium, total	<1.	<1.	<1.		1
Chromium, total	3.36	<3.	12.7		3
Chromium, hexavalent	<3.	<3.	<3.		3
Chromium, trivalent	3.36	<3.	12.7		N/A
Copper, total	4.85	2.73	10.8		2
Cyanide, available	5.3	6.1	<5.		2/10
Lead, total	9.48	2.64	15.8		0.5
Mercury, total	0.0258	0.011	0.0601		0.005/0.0005
Nickel, total	3.42	3.27	11.1		2
Selenium, total	<5.	<5.	<5.		5
Silver, total	<0.5	<0.5	<0.5		0.5
Thallium, total	<0.5	<0.5	<0.5		0.5
Zinc, total	105.	80.3	375.		5.0

TABLE 3 (Instructions, Page 58)

Completion of Table 3 **is required** for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 **is required** for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: See below **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)*
	Outfall 004	Outfall 005A	Outfall 010		
	1-Jul-24	4-Jun-24	1-Jul-24		
Acrylonitrile	<20.	<20.	<20.		50
Anthracene	<5.	<5.	<5.		10
Benzene	14.	<5.	<5.		10

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)*
Benzidine	<5.	<5.	<5.		50
Benzo(a)anthracene	<5.	<5.	<5.		5
Benzo(a)pyrene	<5.	<5.	<5.		5
Bis(2-chloroethyl)ether	<5.	<5.	<5.		10
Bis(2-ethylhexyl)phthalate	<5.	<5.	<5.		10
Bromodichloromethane [Dichlorobromomethane]	<5.	<5.	<5.		10
Bromoform	<5.	<5.	<5.		10
Carbon tetrachloride	<2.	<2.	<2.		2
Chlorobenzene	<5.	<5.	<5.		10
Chlorodibromomethane [Dibromochloromethane]	<5.	<5.	<5.		10
Chloroform	<4.	7.	<4.		10
Chrysene	<5.	<5.	<5.		5
m-Cresol [3-Methylphenol]	<5.	<5.	<5.		10
o-Cresol [2-Methylphenol]	<5.	<5.	<5.		10
p-Cresol [4-Methylphenol]	<5.	<5.	<5.		10
1,2-Dibromoethane	<5.	<5.	<5.		10
m-Dichlorobenzene [1,3-Dichlorobenzene]	<5.	<5.	<5.		10
o-Dichlorobenzene [1,2-Dichlorobenzene]	<5.	<5.	<5.		10
p-Dichlorobenzene [1,4-Dichlorobenzene]	<5.	<5.	<5.		10
3,3'-Dichlorobenzidine	<5.	<5.	<5.		5
1,2-Dichloroethane	<5.	<5.	<5.		10
1,1-Dichloroethene [1,1-Dichloroethylene]	<5.	<5.	<5.		10
Dichloromethane [Methylene chloride]	<5.	<5.	<5.		20
1,2-Dichloropropane	<5.	<5.	<5.		10
1,3-Dichloropropene [1,3-Dichloropropylene]	<5.	<5.	<5.		10
2,4-Dimethylphenol	<5.	<5.	<5.		10
Di-n-Butyl phthalate	<5.	<5.	<5.		10
Ethylbenzene	<5.	<5.	<5.		10
Fluoride	130.	240.	<100.		500
Hexachlorobenzene	<5.	<5.	<5.		5
Hexachlorobutadiene	<2.	<2.	<2.		10
Hexachlorocyclopentadiene	<5.	<5.	<5.		10
Hexachloroethane	<2.	<2.	<2.		20
Methyl ethyl ketone	<5.	<5.	<5.		50
Nitrobenzene	<5.	<5.	<5.		10
N-Nitrosodiethylamine	<5.	<5.	<5.		20
N-Nitroso-di-n-butylamine	<5.	<5.	<5.		20
Nonylphenol	<5.	<5.	<5.		333
Pentachlorobenzene	<5.	<5.	<5.		20
Pentachlorophenol	<5.	<5.	<5.		5

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)*
Phenanthrene	<5.	<5.	<5.		10
Polychlorinated biphenyls (PCBs) (**)	<0.1	<0.1	<0.1		0.2
Pyridine	<5.	<5.	<5.		20
1,2,4,5-Tetrachlorobenzene	<5.	<5.	<5.		20
1,1,2,2-Tetrachloroethane	<5.	<5.	<5.		10
Tetrachloroethene [Tetrachloroethylene]	<5.	<5.	<5.		10
Toluene	<5.	<5.	<5.		10
1,1,1-Trichloroethane	<5.	<5.	<5.		10
1,1,2-Trichloroethane	<5.	<5.	<5.		10
Trichloroethene [Trichloroethylene]	<5.	<5.	<5.		10
2,4,5-Trichlorophenol	<5.	<5.	<5.		50
TTHM (Total trihalomethanes)	<5.	7.	<5.		10
Vinyl chloride	<5.	<5.	<5.		10

(*) Indicate units if different from µg/L.

(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

TABLE 4 (Instructions, Pages 58-59)

Partial completion of Table 4 **is required** for each **external outfall** based on the conditions below.

a. **Tributyltin**

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

☐ Yes ☒ No

If **yes**, check the box next to each of the following criteria which apply and provide the appropriate testing results in Table 4 below (check all that apply).

☐ Manufacturers and formulators of tributyltin or related compounds.

☐ Painting of ships, boats and marine structures.

☐ Ship and boat building and repairing.

☐ Ship and boat cleaning, salvage, wrecking and scaling.

☐ Operation and maintenance of marine cargo handling facilities and marinas.

☐ Facilities engaged in wood preserving.

☐ Any other industrial/commercial facility for which tributyltin is known to be present, or for which there is any reason to believe that tributyltin may be present in the effluent.

b. **Enterococci (discharge to saltwater)**

This facility discharges/proposes to discharge directly into saltwater receiving waters **and** Enterococci bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

c. E. coli (discharge to freshwater)

This facility discharges/proposes to discharge directly into freshwater receiving waters **and** *E. coli* bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

Table 4 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)	N/A	N/A	N/A	N/A	0.010
Enterococci (cfu or MPN/100 mL)	N/A	N/A	N/A	N/A	N/A
E. coli (cfu or MPN/100 mL)	N/A	N/A	N/A	N/A	N/A

TABLE 5 (Instructions, Page 59)

Completion of Table 5 **is required** for all **external outfalls** which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters that may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1

Pollutant	**Sample 1 (µg/L)***	**Sample 2 (µg/L)***	**Sample 3 (µg/L)***	**Sample 4 (µg/L)***	**MAL (µg/L)***
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (*alpha*)					0.01
Endosulfan II (*beta*)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (*alpha*)					0.05
Hexachlorocyclohexane (*beta*)					0.05
Hexachlorocyclohexane (*gamma*) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 **is required** for all **external outfalls**.

Table 6 for Outfall No.: See below **Samples are (check one): ☐ Composite ☒ Grab**

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 1 (mg/L)	Sample 1 (mg/L)		MAL (µg/L)*
			Outfall 004	Outfall 005A	Outfall 010		
			1-Jul-24	4-Jun-24	1-Jul-24		
Bromide	☒	☐	<0.2	<0.2	0.48		400
Color (PCU)	☒	☐	-	100.	-		—
Nitrate-Nitrite (as N)	☒	☐	<0.4	<0.4	0.54		—
Sulfide (as S)	☒	☐	<0.01	0.32	<0.01		—
Sulfite (as SO3)	☐	☒	-	<2.	-		—
Surfactants	☒	☐	0.067	0.14	0.042		—
Boron, total	☒	☐	0.0864	0.153	0.0344		20
Cobalt, total	☒	☐	0.00083	0.00039	0.00183		0.3
Iron, total	☒	☐	1.34	0.432	3.46		7
Magnesium, total	☒	☐	5.82	6.08	5.47		20
Manganese, total	☒	☐	0.0694	0.0991	0.0953		0.5
Molybdenum, total	☒	☐	0.01	0.0075	0.00656		1
Tin, total	☐	☒	<0.005	<0.005	<0.005		5
Titanium, total	☒	☐	0.0163	<0.005	0.0496		30
Note: Field tests were conducted for sulfite and are not part of the accredited analyses.							

TABLE 7 (Instructions, Page 60)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

☒ N/A

Table 7 for Applicable Industrial Categories

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/ Neutrals Table 10	Pesticides Table 11
☐ Adhesives and Sealants		☐ Yes	☐ Yes	☐ Yes	No
☐ Aluminum Forming	467	☐ Yes	☐ Yes	☐ Yes	No
☐ Auto and Other Laundries		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Battery Manufacturing	461	☐ Yes	No	☐ Yes	No
☐ Coal Mining	434	No	No	No	No
☐ Coil Coating	465	☐ Yes	☐ Yes	☐ Yes	No
☐ Copper Forming	468	☐ Yes	☐ Yes	☐ Yes	No
☐ Electric and Electronic Components	469	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Electroplating	413	☐ Yes	☐ Yes	☐ Yes	No
☐ Explosives Manufacturing	457	No	☐ Yes	☐ Yes	No
☐ Foundries		☐ Yes	☐ Yes	☐ Yes	No
☐ Gum and Wood Chemicals - Subparts A,B,C,E	454	☐ Yes	☐ Yes	No	No
☐ Gum and Wood Chemicals - Subparts D,F	454	☐ Yes	☐ Yes	☐ Yes	No
☐ Inorganic Chemicals Manufacturing	415	☐ Yes	☐ Yes	☐ Yes	No
☐ Iron and Steel Manufacturing	420	☐ Yes	☐ Yes	☐ Yes	No
☐ Leather Tanning and Finishing	425	☐ Yes	☐ Yes	☐ Yes	No
☐ Mechanical Products Manufacturing		☐ Yes	☐ Yes	☐ Yes	No
☐ Nonferrous Metals Manufacturing	421,471	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Oil and Gas Extraction - Subparts A, D, E, F, G, H	435	☐ Yes	☐ Yes	☐ Yes	No
☐ Ore Mining - Subpart B	440	No	☐ Yes	No	No
☐ Organic Chemicals Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Paint and Ink Formulation	446,447	☐ Yes	☐ Yes	☐ Yes	No
☐ Pesticides	455	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Petroleum Refining	419	☐ Yes	No	No	No
☐ Pharmaceutical Preparations	439	☐ Yes	☐ Yes	☐ Yes	No
☐ Photographic Equipment and Supplies	459	☐ Yes	☐ Yes	☐ Yes	No
☐ Plastic and Synthetic Materials Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Plastic Processing	463	☐ Yes	No	No	No
☐ Porcelain Enameling	466	No	No	No	No
☐ Printing and Publishing		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Pulp and Paperboard Mills - Subpart C	430	☐ *	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subparts F, K	430	☐ *	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts A, B, D, G, H	430	☐ Yes	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts I, J, L	430	☐ Yes	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subpart E	430	☐ Yes	☐ Yes	☐ Yes	☐ *
☐ Rubber Processing	428	☐ Yes	☐ Yes	☐ Yes	No
☐ Soap and Detergent Manufacturing	417	☐ Yes	☐ Yes	☐ Yes	No
☐ Steam Electric Power Plants	423	☐ Yes	☐ Yes	No	No
☐ Textile Mills (Not Subpart C)	410	☐ Yes	☐ Yes	☐ Yes	No

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/ Neutrals Table 10	Pesticides Table 11
☐ Timber Products Processing	429	☐ Yes	☐ Yes	☐ Yes	☐ Yes

* Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 60)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: See below **Samples are (check one):** ☐ **Composite** ☒ **Grab**

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)
	Outfall 004	Outfall 005A	Outfall 010		
	1-Jul-24	4-Jun-24	1-Jul-24		
Acrolein	<20.	<20.	<20.		50
Acrylonitrile	<20.	<20.	<20.		50
Benzene	14.	<5.	<5.		10
Bromoform	<5.	<5.	<5.		10
Carbon tetrachloride	<2.	<2.	<2.		2
Chlorobenzene	<5.	<5.	<5.		10
Chlorodibromomethane	<5.	<5.	<5.		10
Chloroethane	<5.	<5.	<5.		50
2-Chloroethylvinyl ether	<5.	<5.	<5.		10
Chloroform	<4.	7.	<4.		10
Dichlorobromomethane [Bromodichloromethane]	<5.	<5.	<5.		10
1,1-Dichloroethane	<5.	<5.	<5.		10
1,2-Dichloroethane	<5.	<5.	<5.		10
1,1-Dichloroethylene [1,1-Dichloroethene]	<5.	<5.	<5.		10
1,2-Dichloropropane	<5.	<5.	<5.		10
1,3-Dichloropropylene [1,3-Dichloropropene]	<5.	<5.	<5.		10
Ethylbenzene	<5.	<5.	<5.		10
Methyl bromide [Bromomethane]	<5.	<5.	<5.		50
Methyl chloride [Chloromethane]	<5.	<5.	<5.		50
Methylene chloride [Dichloromethane]	<5.	<5.	<5.		20
1,1,2,2-Tetrachloroethane	<5.	<5.	<5.		10
Tetrachloroethylene [Tetrachloroethene]	<5.	<5.	<5.		10
Toluene	<5.	<5.	<5.		10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]	<4.	<4.	<4.		10
1,1,1-Trichloroethane	<5.	<5.	<5.		10
1,1,2-Trichloroethane	<5.	<5.	<5.		10

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)
Trichloroethylene [Trichloroethene]	<5.	<5.	<5.		10
Vinyl chloride	<5.	<5.	<5.		10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: **See below** **Samples are (check one):** ☐ **Composite** ☒ **Grab**

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)
	Outfall 004	Outfall 005A	Outfall 010		
	1-Jul-24	4-Jun-24	1-Jul-24		
2-Chlorophenol	<5.	<5.	<5.		10
2,4-Dichlorophenol	<5.	<5.	<5.		10
2,4-Dimethylphenol	<5.	<5.	<5.		10
4,6-Dinitro-o-cresol	<10.	<10.	<10.		50
2,4-Dinitrophenol	<10.	<10.	<10.		50
2-Nitrophenol	<5.	<5.	<5.		20
4-Nitrophenol	<10.	<10.	<10.		50
p-Chloro-m-cresol	<5.	<5.	<5.		10
Pentachlorophenol	<5.	<5.	<5.		5
Phenol	<2.	<2.	<2.		10
2,4,6-Trichlorophenol	<5.	<5.	<5.		10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: **See below** **Samples are (check one):** ☐ **Composite** ☒ **Grab**

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)
	Outfall 004	Outfall 005A	Outfall 010		
	1-Jul-24	4-Jun-24	1-Jul-24		
Acenaphthene	<5.	<5.	<5.		10
Acenaphthylene	<5.	<5.	<5.		10
Anthracene	<5.	<5.	<5.		10
Benzidine	<5.	<5.	<5.		50
Benzo(a)anthracene	<5.	<5.	<5.		5
Benzo(a)pyrene	<5.	<5.	<5.		5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]	<5.	<5.	<5.		10
Benzo(ghi)perylene	<5.	<5.	<5.		20
Benzo(k)fluoranthene	<5.	<5.	<5.		5
Bis(2-chloroethoxy)methane	<5.	<5.	<5.		10
Bis(2-chloroethyl)ether	<5.	<5.	<5.		10
Bis(2-chloroisopropyl)ether	<5.	<5.	<5.		10
Bis(2-ethylhexyl)phthalate	<5.	<5.	<5.		10
4-Bromophenyl phenyl ether	<5.	<5.	<5.		10
Butylbenzyl phthalate	<5.	<5.	<5.		10
2-Chloronaphthalene	<5.	<5.	<5.		10
4-Chlorophenyl phenyl ether	<5.	<5.	<5.		10
Chrysene	<5.	<5.	<5.		5
Dibenzo(a,h)anthracene	<5.	<5.	<5.		5

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)
1,2-Dichlorobenzene [o-Dichlorobenzene]	<5.	<5.	<5.		10
1,3-Dichlorobenzene [m-Dichlorobenzene]	<5.	<5.	<5.		10
1,4-Dichlorobenzene [p-Dichlorobenzene]	<5.	<5.	<5.		10
3,3'-Dichlorobenzidine	<5.	<5.	<5.		5
Diethyl phthalate	<5.	<5.	<5.		10
Dimethyl phthalate	<2.	<5.	<2.		10
Di-n-butyl phthalate	<5.	<5.	<5.		10
2,4-Dinitrotoluene	<5.	<5.	<5.		10
2,6-Dinitrotoluene	<5.	<5.	<5.		10
Di-n-octyl phthalate	<5.	<5.	<5.		10
1,2-Diphenylhydrazine (as Azobenzene)	<5.	<5.	<5.		20
Fluoranthene	<5.	<5.	<5.		10
Fluorene	<5.	<5.	<5.		10
Hexachlorobenzene	<5.	<5.	<5.		5
Hexachlorobutadiene	<2.	<2.	<2.		10
Hexachlorocyclopentadiene	<5.	<5.	<5.		10
Hexachloroethane	<2.	<2.	<2.		20
Indeno(1,2,3-cd)pyrene	<5.	<5.	<5.		5
Isophorone	<5.	<5.	<5.		10
Naphthalene	<4.	<2.	<2.		10
Nitrobenzene	<5.	<5.	<5.		10
N-Nitrosodimethylamine	<5.	<5.	<5.		50
N-Nitrosodi-n-propylamine	<5.	<5.	<5.		20
N-Nitrosodiphenylamine	<5.	<5.	<5.		20
Phenanthrene	<5.	<5.	<5.		10
Pyrene	<5.	<5.	<5.		10
1,2,4-Trichlorobenzene	<5.	<5.	<5.		10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: **See below** **Samples are (check one):** ☐ **Composite** ☒ **Grab**

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)
	Outfall 004	Outfall 005A	Outfall 010		
	1-Jul-24	4-Jun-24	1-Jul-24		
Aldrin	-	-	-		0.01
alpha-BHC [alpha-Hexachlorocyclohexane]	-	-	-		0.05
beta-BHC [beta-Hexachlorocyclohexane]	-	-	-		0.05
gamma-BHC [gamma-Hexachlorocyclohexane]	-	-	-		0.05
delta-BHC [delta-Hexachlorocyclohexane]	-	-	-		0.05
Chlordane	-	-	-		0.2

Pollutant	Sample 1 (µg/L)*	Sample 1 (µg/L)*	Sample 1 (µg/L)*		MAL (µg/L)
4,4'-DDT	-	-	-		0.02
4,4'-DDE	-	-	-		0.1
4,4'-DDD	-	-	-		0.1
Dieldrin	-	-	-		0.02
Endosulfan I (alpha)	-	-	-		0.01
Endosulfan II (beta)	-	-	-		0.02
Endosulfan sulfate	-	-	-		0.1
Endrin	-	-	-		0.02
Endrin aldehyde	-	-	-		0.1
Heptachlor	-	-	-		0.01
Heptachlor epoxide	-	-	-		0.01
PCB 1242	<0.1	<0.1	<0.1		0.2
PCB 1254	<0.1	<0.1	<0.1		0.2
PCB 1221	<0.1	<0.1	<0.1		0.2
PCB 1232	<0.1	<0.1	<0.1		0.2
PCB 1248	<0.1	<0.1	<0.1		0.2
PCB 1260	<0.1	<0.1	<0.1		0.2
PCB 1016	<0.1	<0.1	<0.1		0.2
Toxaphene	-	-	-		0.3

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

- ☐ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5
- ☐ 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1
- ☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4
- ☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) CASRN 299-84-3
- ☐ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4
- ☐ hexachlorophene (HCP) CASRN 70-30-4
- ☒ None of the above

Description: N/A

Does the applicant or anyone at the facility know or have any reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) or any congeners of TCDD may be present in the effluent proposed for discharge?

☐ Yes ☒ No

Description: N/A

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: N/A **Samples are (check one): ☐ Composite ☐ Grab**

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8-PeCDD	1.0					50
2,3,7,8-HxCDDs	0.1					50
1,2,3,4,6,7,8-HpCDD	0.01					50
2,3,7,8-TCDF	0.1					10
1,2,3,7,8-PeCDF	0.03					50
2,3,4,7,8-PeCDF	0.3					50
2,3,7,8-HxCDFs	0.1					50
2,3,4,7,8-HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					500
PCB 81	0.0003					500
PCB 126	0.1					500
PCB 169	0.03					500
Total						

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

☒ Yes ☐ No

Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

☐ Yes ☒ No

If **yes** to either Items a **or** b, complete Table 13 as instructed.

Table 13 for Outfall No.: See below **Samples are (check one): ☐ Composite ☒ Grab**

Pollutant	**CASRN**	**Sample 1 (µg/L)**	**Sample 1 (µg/L)**	**Sample 1 (µg/L)**		**Analytical Method**
		Outfall 004	Outfall 005A	Outfall 010		
		7/1/24	6/4/24	7/1/24		
Cyclohexane	110-82-7	<5	<5	<5		624.1
Vanadium, total	7440-62-2	7.51	<5	9.72		200.8
Xylenes (o/m/p)	1330-20-7	<5	<5	<5		624.1

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: ~330 feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☒ Yes ☐ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: ~27 feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a. Name of the immediate receiving waters: Unnamed ditch

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond

- Surface area (acres): N/A
- Average depth of the entire water body (feet): N/A
- Average depth of water body within a 500-foot radius of the discharge point (feet): N/A

☒ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☐ Other, specify:

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☒ Intermittent (dry for at least one week during most years)

☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records

☐ personal observation

☐ historical observation by adjacent landowner(s)

☒ other, specify: Google Earth (Outfall 004 is at the head of the unnamed ditch)

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: West Basin, thence to Sabine-Neches Canal Tidal in Segment No. 0703 of the Neches-Trinity Coastal Basin

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☒ Yes ☐ No

If **yes**, describe how: The immediate receiving water is an unnamed ditch, which flows into the much wider West Basin

f. General observations of the water body during normal dry weather conditions: Click to enter text.

Date and time of observation: Click to enter text.

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☐ No

If **yes**, describe how: Click to enter text.

Item 5. General Characteristics of Water Body (Instructions, Page 81)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

☐ oil field activities
☐ agricultural runoff
☐ upstream discharges
☐ urban runoff
☐ septic tanks
☒ other, specify: N/A

b. Uses of water body observed or evidence of such uses (check all that apply):

☐ livestock watering
☐ non-contact recreation
☐ domestic water supply
☐ contact recreation
☐ fishing
☐ industrial water supply
☐ irrigation withdrawal
☐ navigation
☐ picnic/park activities
☒ other, specify: stormwater drainage

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional

☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☒ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid

☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: ~25 feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a. Name of the immediate receiving waters: Unnamed ditch (inlet channel to Alligator Bayou)

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond

- Surface area (acres): N/A
- Average depth of the entire water body (feet): N/A
- Average depth of water body within a 500-foot radius of the discharge point (feet): N/A

☒ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☐ Other, specify:

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☐ Intermittent (dry for at least one week during most years)

☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☒ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records

☐ personal observation

☐ historical observation by adjacent landowner(s)

☒ other, specify: Google Earth (the ditch is tidally influenced and water is present)

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: Unnamed ditch (inlet channel to Alligator Bayou), thence to Alligator Bayou (Main Canal D), thence to Taylor Bayou Tidal (JCDD No. 7 Main Outfall Canal) portion of the Intracoastal Waterway Tidal in Segment No. 0702 of the Neches-Trinity River Basin

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☒ Yes ☐ No

If **yes**, describe how: The immediate receiving water is an unnamed ditch, which flows into the much wider Alligator Bayou and Taylor Bayou

f. General observations of the water body during normal dry weather conditions: Click to enter text.

Date and time of observation: Click to enter text.

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☐ No

If **yes**, describe how: Click to enter text.

Item 5. General Characteristics of Water Body (Instructions, Page 81)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

☐ oil field activities
☐ agricultural runoff
☐ upstream discharges
☐ urban runoff
☐ septic tanks
☐ other, specify: N/A

b. Uses of water body observed or evidence of such uses (check all that apply):

☐ livestock watering
☐ non-contact recreation
☐ domestic water supply
☐ contact recreation
☐ fishing
☐ industrial water supply
☐ irrigation withdrawal
☐ navigation
☐ picnic/park activities
☐ other, specify: N/A

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional

☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☒ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid

☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: ~330 feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☒ Yes ☐ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: N/A feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a. Name of the immediate receiving waters: Unnamed ditch (inlet channel to Alligator Bayou)

b. Check the appropriate description of the immediate receiving waters:

☒ Lake or Pond

- Surface area (acres): 3.0
- Average depth of the entire water body (feet): N/A
- Average depth of water body within a 500-foot radius of the discharge point (feet): N/A

☐ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☐ Other, specify:

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☐ Intermittent (dry for at least one week during most years)

☒ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records

☐ personal observation

☐ historical observation by adjacent landowner(s)

☒ other, specify: Google Earth

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: Unnamed pond, thence to an unnamed ditch, thence to Alligator Bayou (Main Canal D), thence to Taylor Bayou Tidal (JCDD No. 7 Main Outfall Canal) portion of the Intracoastal Waterway Tidal in Segment No. 0702 of the Neches-Trinity River Basin.

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☒ Yes ☐ No

If **yes**, describe how: The immediate receiving water is an unnamed pond, which flows into the much wider Alligator Bayou and Taylor Bayou

f. General observations of the water body during normal dry weather conditions: Click to enter text.

Date and time of observation: Click to enter text.

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☐ No

If **yes**, describe how: Click to enter text.

Item 5. General Characteristics of Water Body (Instructions, Page 81)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

☐ oil field activities
☐ agricultural runoff
☐ upstream discharges
☐ urban runoff
☐ septic tanks
☐ other, specify: N/A

b. Uses of water body observed or evidence of such uses (check all that apply):

☐ livestock watering
☐ non-contact recreation
☐ domestic water supply
☐ contact recreation
☐ fishing
☐ industrial water supply
☐ irrigation withdrawal
☐ navigation
☐ picnic/park activities
☐ other, specify: N/A

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional

☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☒ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid

☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: N/A feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☒ Yes ☐ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: N/A feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a. Name of the immediate receiving waters: Unnamed channel

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond

- Surface area (acres): N/A
- Average depth of the entire water body (feet): N/A
- Average depth of water body within a 500-foot radius of the discharge point (feet): N/A

☐ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☒ Other, specify: Channel

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☐ Intermittent (dry for at least one week during most years)

☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records

☐ personal observation

☐ historical observation by adjacent landowner(s)

☐ other, specify:

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: Unnamed channel, thence to unnamed pond, thence to unnamed ditch, thence to Alligator Bayou (Main Canal D), thence to Taylor Bayou Tidal (JCDD No. 7 Main Outfall Canal) portion of the Intracoastal Waterway Tidal in Segment No. 0702 of the Neches-Trinity River Basin

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☒ Yes ☐ No

If **yes**, describe how: The immediate receiving water is an unnamed channel, which flows into an unnamed pond, which flows into the much wider Alligator Bayou and Taylor Bayou

f. General observations of the water body during normal dry weather conditions: Click to enter text.

Date and time of observation: Click to enter text.

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☐ No

If **yes**, describe how: Click to enter text.

Item 5. General Characteristics of Water Body (Instructions, Page 81)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

☐ oil field activities
☐ agricultural runoff
☐ upstream discharges
☐ urban runoff
☐ septic tanks
☐ other, specify:

b. Uses of water body observed or evidence of such uses (check all that apply):

☐ livestock watering
☐ non-contact recreation
☐ domestic water supply
☐ contact recreation
☐ fishing
☐ industrial water supply
☐ irrigation withdrawal
☐ navigation
☐ picnic/park activities
☐ other, specify:

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional

☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☒ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid

☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

INDUSTRIAL WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: N/A feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

Item 3. Classified Segment (Instructions, Page 80)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here and do not complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a. Name of the immediate receiving waters: Foley Outfall Canal

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond

- Surface area (acres): N/A
- Average depth of the entire water body (feet): N/A
- Average depth of water body within a 500-foot radius of the discharge point (feet): N/A

☒ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☐ Other, specify:

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☐ Intermittent (dry for at least one week during most years)

☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☒ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records

☐ personal observation

☐ historical observation by adjacent landowner(s)

☒ other, specify: Google Earth

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: Jefferson County Drainage District No. 7 Foley Outfall Canal, thence to the Sabine-Neches Canal Tidal in Segment No. 0703 of the Neches-Trinity River Basin

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☒ Yes ☐ No

If **yes**, describe how: The immediate receiving water is the Foley Outfall Canal, which flows into the wider Sabine-Neches Canal Tidal.

f. General observations of the water body during normal dry weather conditions: Click to enter text.

Date and time of observation: Click to enter text.

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☐ No

If **yes**, describe how: Click to enter text.

Item 5. General Characteristics of Water Body (Instructions, Page 81)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

☐ oil field activities
☐ agricultural runoff
☐ upstream discharges
☐ urban runoff
☐ septic tanks
☐ other, specify:

b. Uses of water body observed or evidence of such uses (check all that apply):

☐ livestock watering
☐ non-contact recreation
☐ domestic water supply
☐ contact recreation
☐ fishing
☐ industrial water supply
☐ irrigation withdrawal
☐ navigation
☐ picnic/park activities
☐ other, specify:

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional

☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☒ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid

☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

Table 4. Refining Production Levels

Process	Production Capacities (thousand barrels per stream day, MBSD)	
	Typical	Design
Crude Processes		
Atmospheric Crude Distillation	405	430
Crude Desalting	405	430
Vacuum Crude Distillation	202	250
Cracking and Coking Processes		
Fluid Catalytic Cracking	75	80
Hydrocracking	130	135
Delayed Coking	145	160
Hydrotreating	312	358
Reforming and Alkylation Processes		
Catalytic Reforming	55	58

ATTACHMENT A-5

PHIL KELLEY
MANAGER

Jefferson County Drainage District No. 7

January 14, 2019

Ms. Paula LaRocca
Manager Environmental Engineering
Port Arthur Refinery, The Premcor Refining Group, Inc., A Valero Company
PO Box 909
Port Arthur, TX 77641-0909

Dear Ms. LaRocca:

Jefferson County Drainage District No. 7 (DD7) has reviewed your request by letter dated November 29, 2018 regarding discharge of treated wastewater and stormwater into the DD7 outfall system. The previously permitted outfalls (2016) are designated as 001, 005A, 004, 005B, 005C, and previously permitted, but unconstructed, outfalls designated as 006 and 008. We understand that five new stormwater outfalls are proposed which are designated as 010, 011, 012, 013, and 014. Outfalls 006, 013, and 014 are planned to penetrate the DD7 Hurricane Flood Protection Levee system (HFPL) and will require both DD7 review and authorization and United States Army Corps of Engineers (USACE) review and approval subject to Section 14 of the Rivers and Harbors Act of 1899, which has since been amended several times and is codified at 33 USC 408 (Section 408).

DD7 approves the listed and permitted discharges subject to the following conditions:

1. Premcor/Valero understands that the primary purpose of the HFPL and associated structures is for storm surge protection.
2. DD7 does not exercise control or have authority to control industrial wastewater or stormwater discharge quality.
3. Premcor/Valero agree to indemnify and hold harmless DD7 with regard to any unauthorized discharges and /or discharge permit violations, including (but not limited to) those arising from environmental liabilities and or obligations under applicable federal, state, and local laws.

ATTACHMENT A-5

4. No modifications to the HFPL system or any DD7 outfall channel are authorized without prior approval of DD7 and the USACE.
5. Operation of gates or other structures will be subject to conditions specified by DD7 and that discharge structures will be closed according to DD7 operations guidelines during hurricane, tropical storm, or other storm surge threats.
6. DD7 will be informed regarding all gate operations relative to the Premcor/Valero discharge permit.
7. DD7 may revoke this agreement at any time, without notice, if it is determined that the operation of outfalls and structures is not in accordance with the conditions of this agreement.

If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

Phil Kelley
General Manager

Aqueous Phase Wastewater

Organic Phase Wastewater

Solids/Sludge

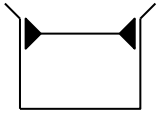
Vapor

Nitrogen

Filtered Water

Normal Flow Direction

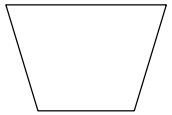
Alternate Flow Direction



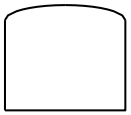
External Floating Roof Tank

Open Tank

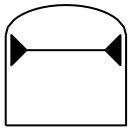
Vessel - General



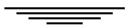
Dewatering Box



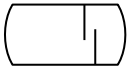
Fixed Roof Tank



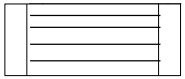
Fixed Roof With Internal Floater



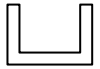
Water Level



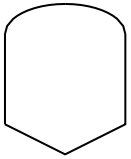
Separator



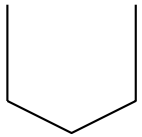
Cooler



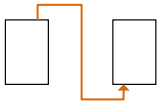
Conduit/Surface Impoundment



Fixed Roof DNF or Clarifier



Clarifier



Carbon Canisters

ATTACHMENT T-2

NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Added Dewatering Box Symbol	MMM	8/16/18

Premcor

The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-K1

SCALE: NONE

SHEET 1 OF 10

WWTU No. 8742 Equipment List		
Equipment Number	Equipment Name	Page Number
C-8000	Wet Surface Air Cooler	8
D-3410	Dissolved Nitrogen Flotation Pressurization Tank	5
D-3420	Dissolved Nitrogen Flotation Pressurization Tank	5
D-8000	Clarifier Effluent Stand Pipe	8
F-8000A	Primary Carbon Canister	8
F-8000B	Secondary Carbon Canister	8
L-1010	API Separator	4
L-1020	API Separator	4
L-1030	API Separator	4
L-1110	API Effluent Tank	4
L-1120	API Effluent Tank	4
L-1210	API Skim Oil Tank	7
L-1310	Skim Oil Tank	7
L-1410	Solids Thickening Tank	7
L-2010	Equalization Tank	4
L-3010	Flocculation Tank	4
L-3110	Dissolved Nitrogen Flotation	5
L-3120	Dissolved Nitrogen Flotation	5
L-3210	Disolved Nitrogen Flotation Float Tank	7
L-3310	Dissolved Nitrogen Flotation Effluent Tank	5
L-3320	Dissolved Nitrogen Flotation Effluent Tank	5

WWTU No. 8742 Equipment List		
Equipment Number	Equipment Name	Page Number
L-5010	First Stage Aeration	5
L-5020	Second Stage Aeration	5
L-6002	Flow Splitting Tank	6
L-1502	Scum Transfer Tank	6
L-6005	Scum Transfer Tank	6
L-6010	Clarifier	6
L-6020	Clarifier	6
L-6110	Clarifier Effluent Transfer Tank	6
L-8000	Clarifier	8
L-8010	WWTU Collection Sump	7
L-8020	Clarifier	8
L-8050	Collection Sump	8
PS 15	Pump Station No. 15	3
T-2554	Clarifier	6
TK-1500	Hypochlorite Storage Tank	6
TK-1501	Hypochlorite Storage Tank	6
TK 1790	Waste Oil Recovery Tank	7
TK 1791	Waste Oil Recovery Tank	7
TK 1912	Surface Drainage Tank	3
TK 8000	Oil Transfer Tank	8
TK 8020	Reactor Tank	8
TK 8070	Reactor Tank	8

NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	10/31/13
1	Removed L-6003 and L-6007 Scum Transfer Tanks and added L-1502 Scum Transfer Tank	MMM	8/21/18
2	Added Hypochlorite Storage Tanks L-1500/1501	MMM	8/24/18

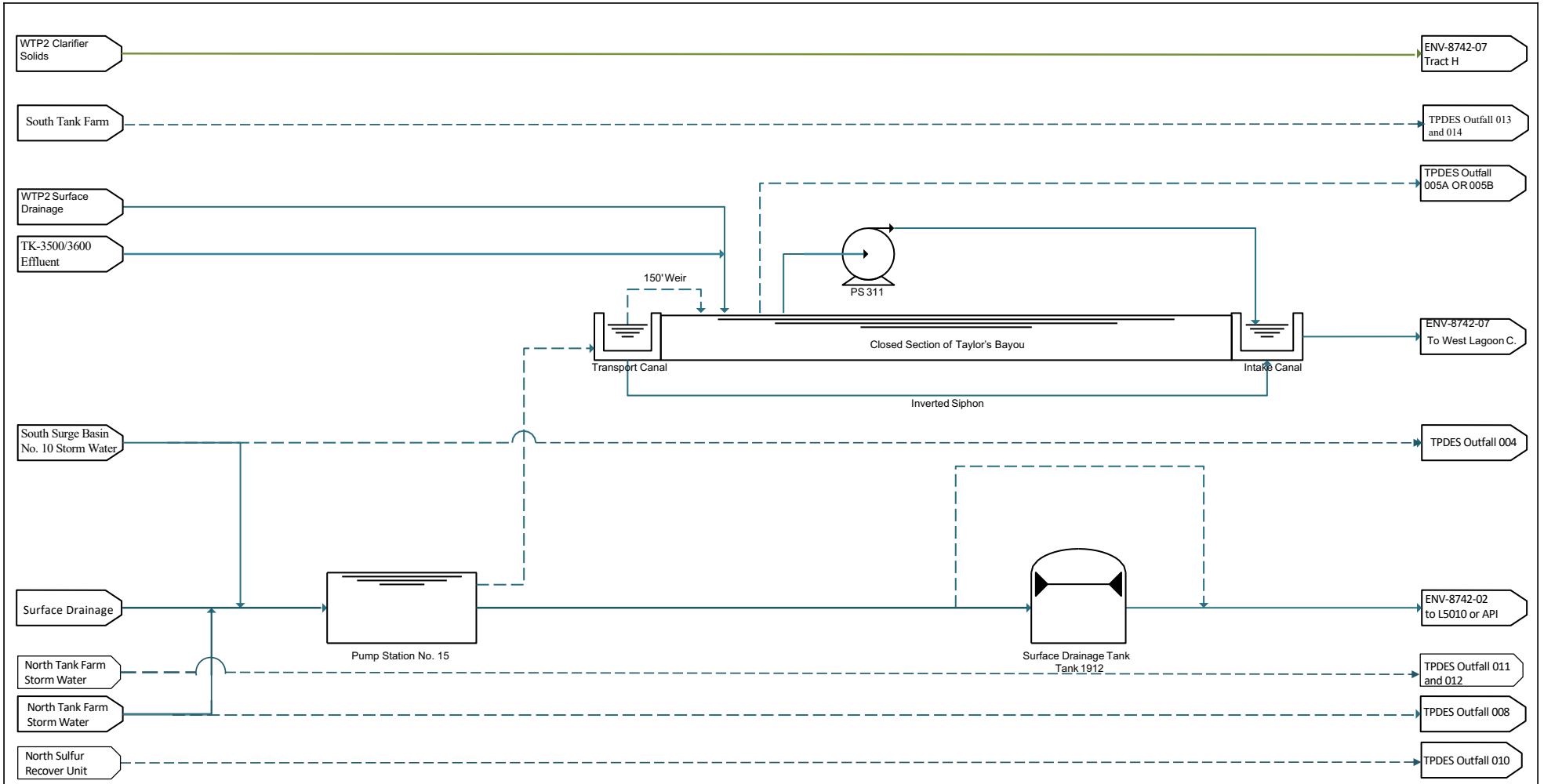
Premcor

The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-K2

SCALE: NONE



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Changed PS15/Tk1912 Effluent Flow arrow to ENV-8742-02.	PMG	10/10/13
2	Added TK-3500/3600 Effluent Stream	PMG	10/25/13
3	Changed TPDES Outfall 005B or 005C to 005A or005B & Added Outfall 011. Changed Track H to Dewatering Boxes,. Added Outfall 010 & 011. Removed Boiler House 16 Storm Water o Intake Canal	MMM	8/14/18
3	Added Outfall 012, 013 and 014	MMM	10/2/18

Premcor

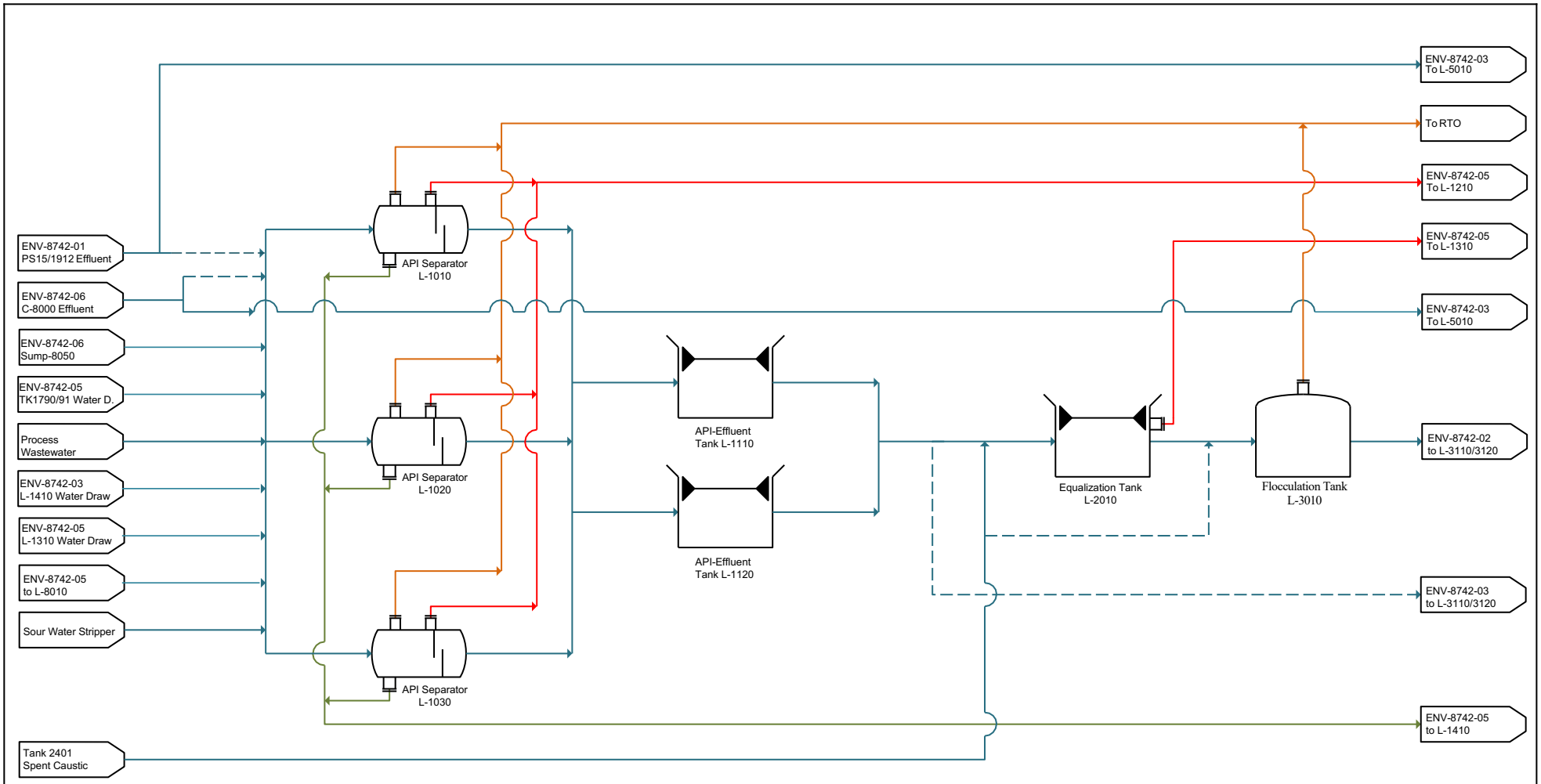
The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-01

SCALE: NONE

SHEET 3 OF 10



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Removed DWG. No. From Sour Water Stripper arrow	PMG	10/10/13

Premcor

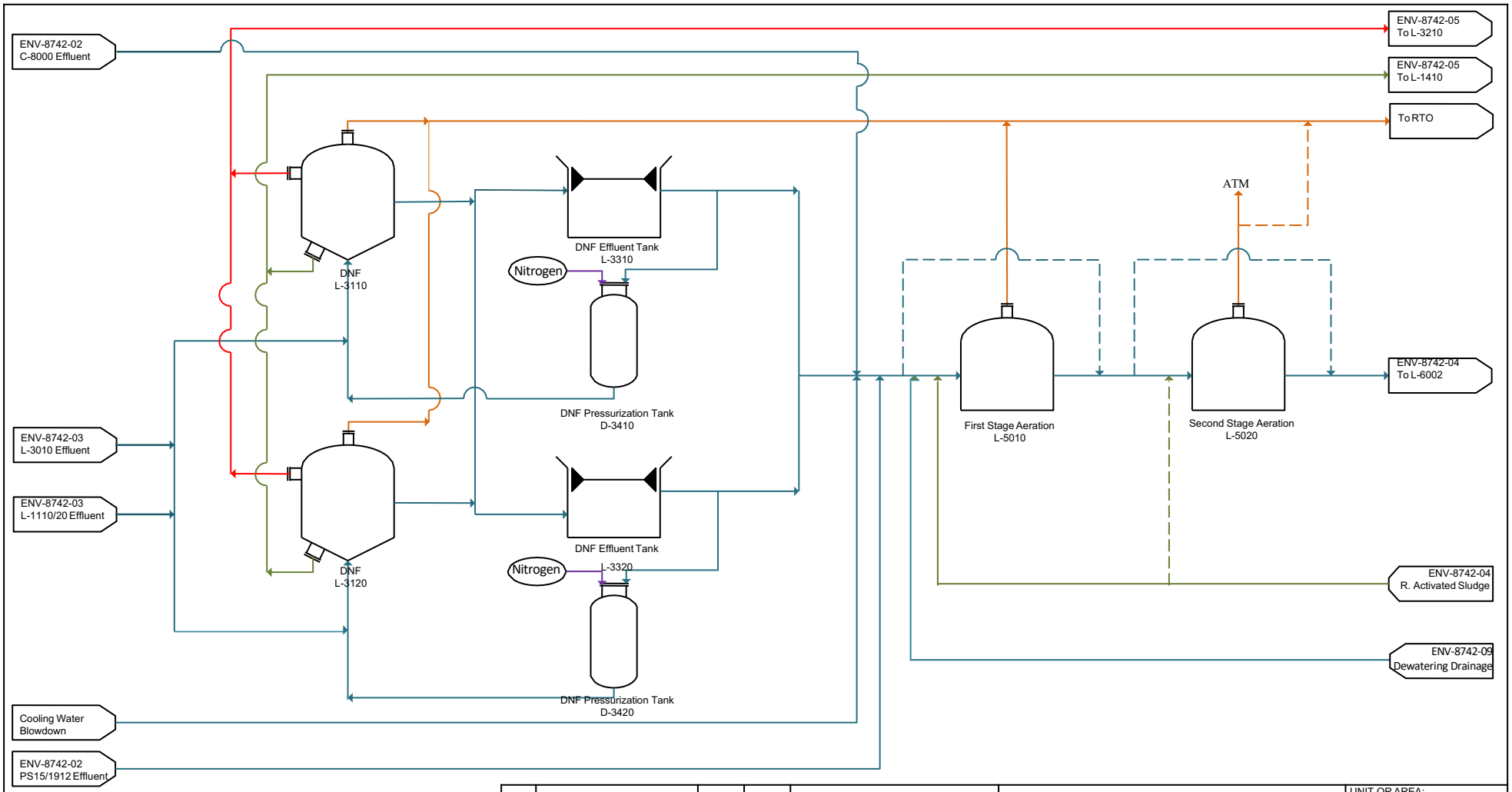
The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-02

SCALE: NONE

SHEET 4 OF 10



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Correction: WSAC Effluent Routed to L-5010	PMG	3/24/14
2	Indicated RAS to L-5010 as an alternative flow path	PMG	1/23/15

Premcor

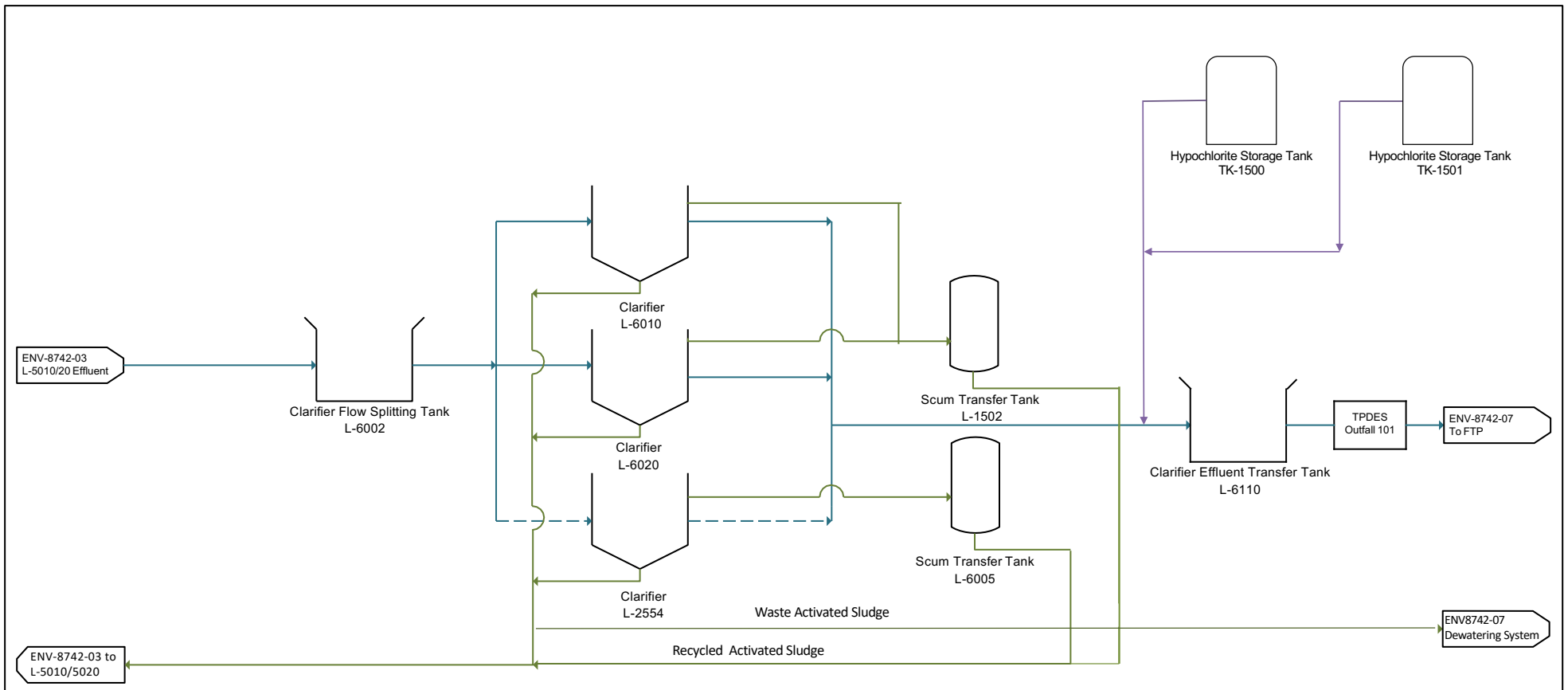
The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-03

SCALE: NONE

SHEET 5 OF 10



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Removed L-6007 & 6003 & added L-1502.	MMM	8/15/18
2	Added TK-1500/1501 Hypochlorite Storage Tanks	MMM	8/24/18

Premcor

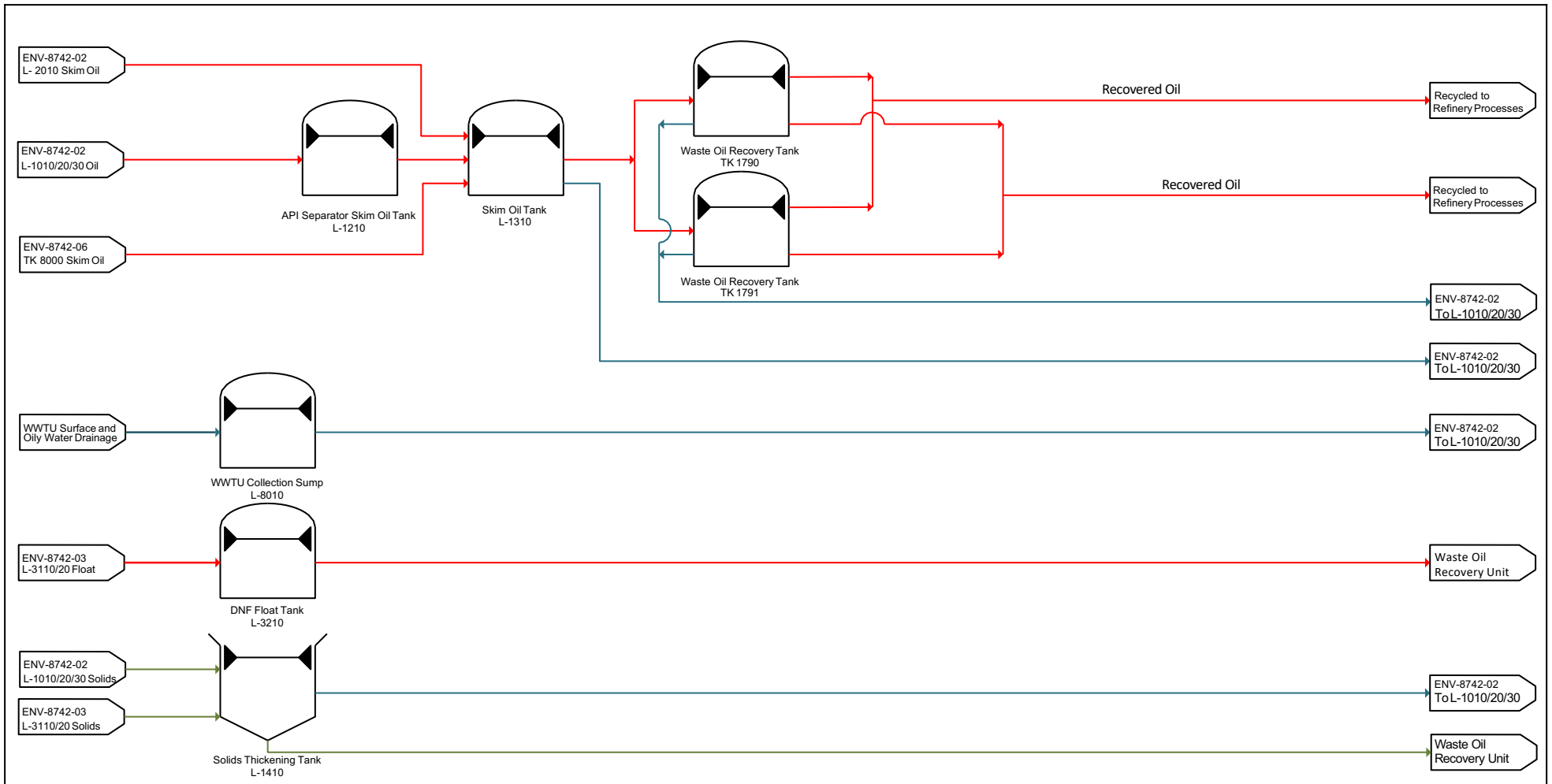
The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-04

SCALE: NONE

SHEET 6 OF 10



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Changed "Clean Oil" "and Emulsified Oil" to "Recovered Oil". Changed "Mobil Oil Sludge Coking Process" to "Recycled to Refinery Processes" & "Waste Oil Recovery Unit".	MMM	8/14/18

Premcor

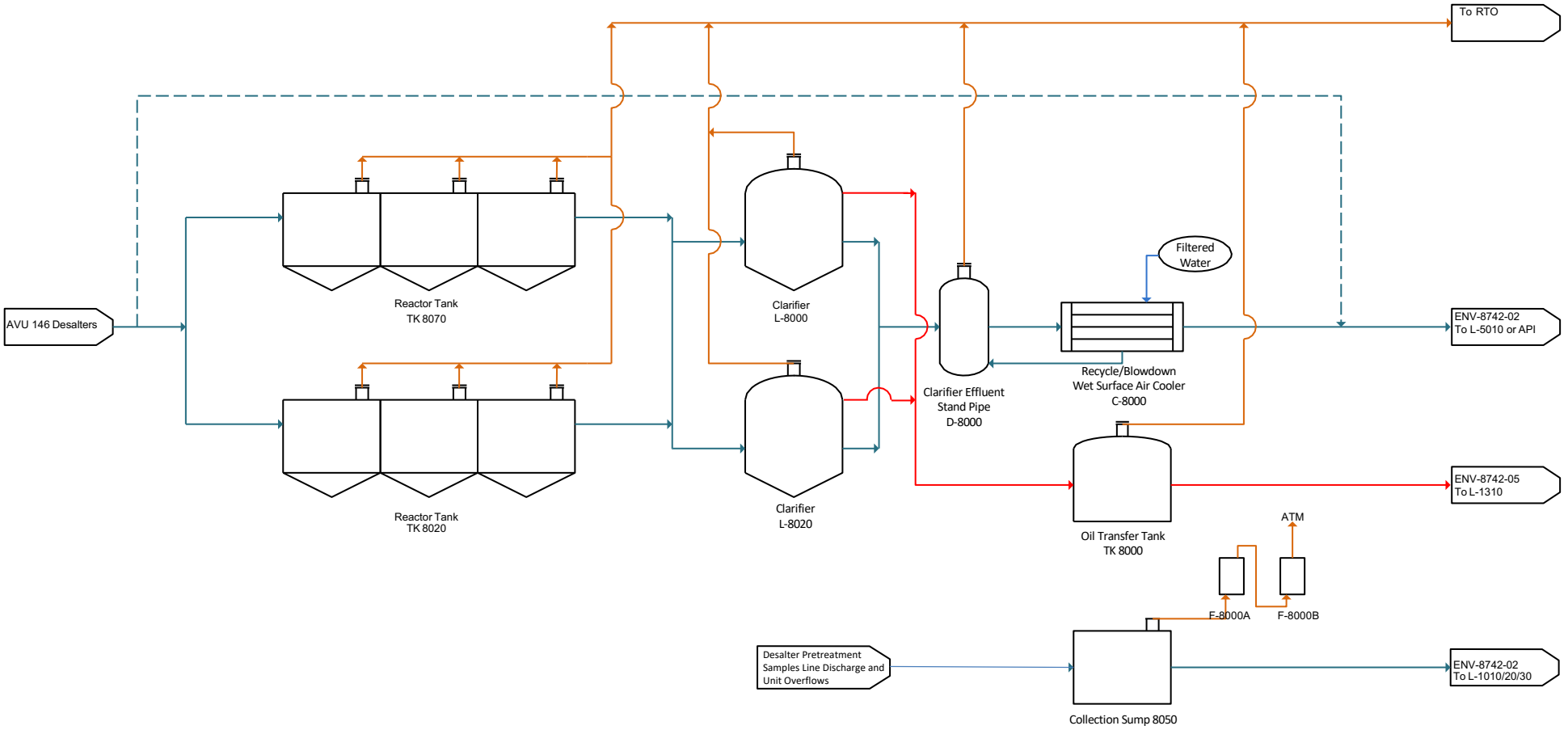
The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-05

SCALE: NONE

SHEET 7 OF10



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Desalter Pretreatment In Service	PMG	3/11/14

Premcor

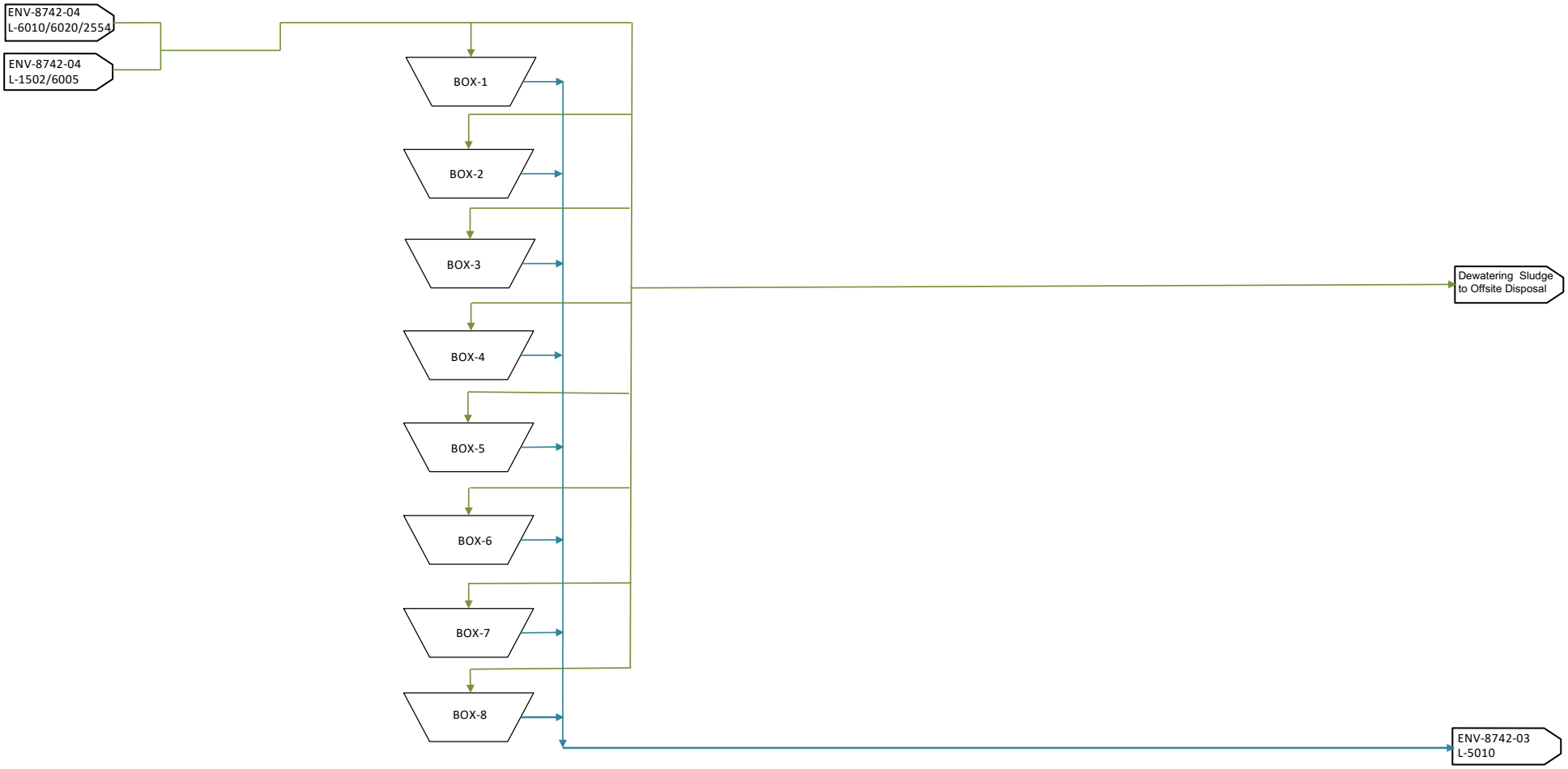
The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-06

SCALE: NONE

SHEET 8 OF 10



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	MMM	8/21/18

Premcor

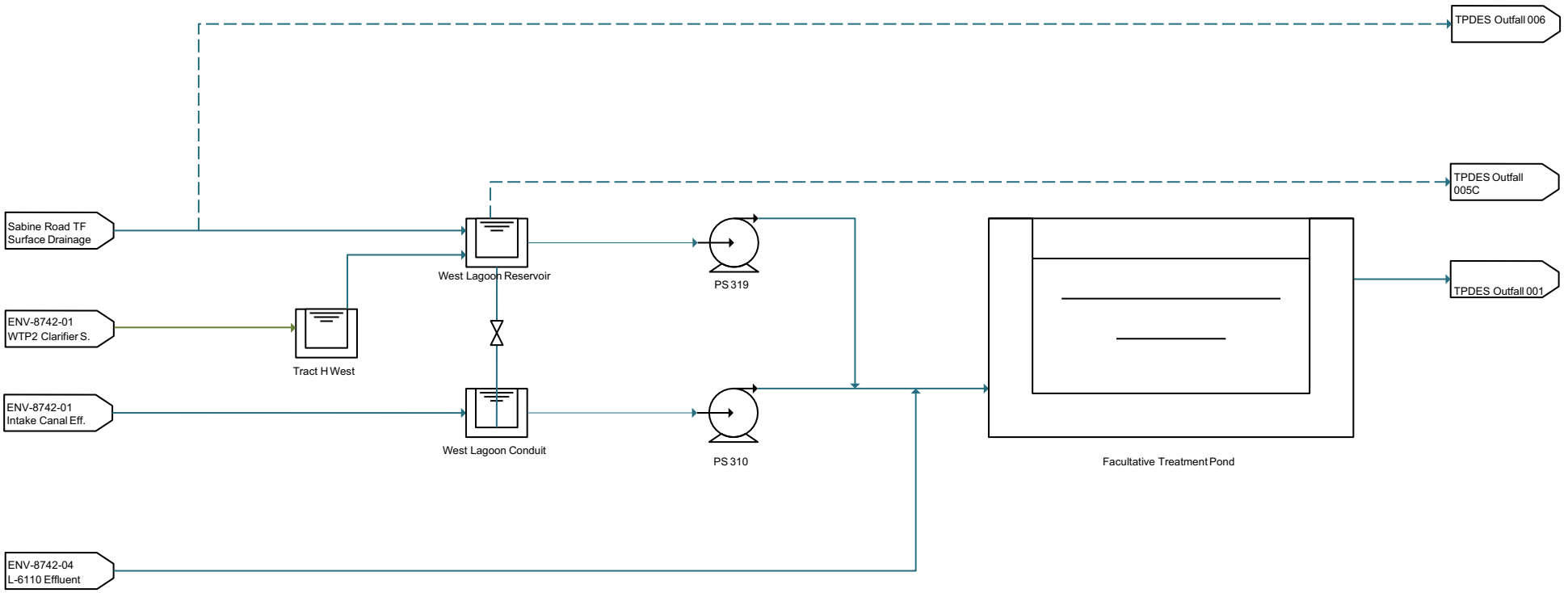
The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-06

SCALE: NONE

SHEET 8 OF 10



NO.	Revision	BY	DATE
0	ORIGINAL ISSUE	PMG	9/10/13
1	Removed Outfall 007	PMG	1/23/15
2	Changed TPDES Outfall 005A to 005C & Removed WAS line to Tract H West	MMM	8/14/18

Premcor

The Premcor Refining Group, Inc.,
A Valero Company Port Arthur Refinery
Process Flow Diagram

UNIT OR AREA: WWTU No. 8742

DWG. NO.: ENV-8742-08

SCALE: NONE

SHEET 10 OF 10

ATTACHMENT T-1
VALERO PORT ARTHUR REFINERY
FACILITY DESCRIPTION

VALERO PORT ARTHUR REFINERY
FACILITY DESCRIPTION

This document is a description of The Premcor Refining Group, Inc. Valero Port Arthur Refinery in relation to its wastewater discharge TPDES Permit No. WQ0000309000. This description includes outfall locations, discharges through the outfalls, wastewater and stormwater management, and applicability of national effluent guidelines. This document was prepared as part of the facility's 2024 renewal application for its TPDES permit.

OVERVIEW

The Valero Port Arthur Refinery is a petroleum refinery (SIC 2911) with integrated chemicals production. Diamond Green Diesel LLC (DGD) is a green diesel production facility (SIC 2869) located on-site that routes its wastewaters to Valero's wastewater system. DGD is the operating subsidiary of Diamond Green Diesel Holding LLC, a joint venture formed by Diamond Alternative Energy LLC (a wholly-owned subsidiary of Valero Energy Corporation) and Darling Green Energy LLC (a wholly-owned subsidiary of Darling Ingredients, Inc.) The DGD plant converts waste grease, animal fats (e.g. tallow byproducts from food processors), used cooling oils, and other plant and vegetable oils into renewable fuel products, including diesel, renewable naphtha/gasoline, renewable liquid petroleum gases (LPG)/propane, and light end gases (LEG). DGD is expected to start up a sustainable aviation fuel (SAF) unit in 2024. The SAF unit will allow DGD to take a portion of the produced renewable diesel and convert it into renewable jet fuel.

WASTEWATER SYSTEM

Wastewater generated by refinery operations include process wastewater, cooling tower blowdown, boiler blowdown, stormwater, hydrostatic test water, sanitary (domestic) wastewater, and wastewater from certain on-site remediation activities. For wastewater treatment, the refinery operates an activated sludge treatment system, preceded by primary oil/water separation, and dissolved nitrogen flotation. Secondary clarification follows the activated sludge units. Following the secondary clarification system is a disinfection system. Certain hazardous wastes maybe treated in the wastewater system in accordance with hazardous waste regulations. Biosolids are dewatered and shipped off-site for disposal and raw water treatment solids are pumped to Tract H West and gravity separated from the water. All treated process wastewater from the activated sludge system and normally, all of the site stormwater, is treated in a tertiary facultative pond before discharge. During extreme rainfall events, stormwater may be discharged directly to the receiving stream.

Wastewater treatment units are listed in Table 1.

PRETREATMENT – SOUR WATER

Prior to primary treatment, sour water is normally treated in one of the Sour Water Stripper Units (8746/8747/8748/8749). Stripped sour water can be sent to either primary treatment or recycled to the refinery as make-up water.

PRETREATMENT – DESALTER EFFLUENT

Some desalter brine effluent may undergo pretreatment. Desalter effluent pretreatment begins at the Reactor Tank, where coagulation (aided by application of aluminum sulfate or equivalent coagulant), pH adjustment (aided by application of spent or fresh caustic) and flocculation occur. The Reactor Tank effluent flows to Clarification (L-8000/8020), and then to the Wet Surface Air Cooler (WSAC, C-8000). The WSAC effluent is then sent to either primary or secondary treatment. Decanted oil from Clarification is sent to the Oil Transfer Tank.

PRETREATMENT – REGENERATE EFFLUENT

Cation and anion regenerate effluent from the Ecodyne Deionization (DI) Unit from Water Treatment Plant No. 2 is neutralized in one of the neutralization tanks (TK-3500/3600) prior to discharge into the Closed Section of Taylor Bayou (CSTB).

PRETREATMENT – SURFACE DRAINAGE

Stormwater and utility wastewater (surface drainage) that converges at Pump Station 15 (PS-15) are normally pumped to the Surface Drainage Tank for load equalization (except when the amount of surface drainage flow exceeds the treatment capacity of primary or secondary treatment). The Surface Drainage Tank effluent can be routed to either primary or secondary treatment.

PRIMARY TREATMENT

Normally, initial primary treatment begins with API Separation (API). The API aqueous phase effluent is normally sent to Dissolved Nitrogen Flotation (DNF). However, if additional primary treatment is needed, this effluent can be routed to Equalization, thence to Flocculation, and then onward to DNF.

SECONDARY TREATMENT

The activated sludge system is composed of two aeration tanks (L-5010/5020) that can be operated in series, and two clarifiers (L-6010/6020) that are normally operated in parallel. The third clarifier (L-2554) can operate in parallel or act as a back-up on an as-needed basis. Depending on process conditions, L-5010 tank can also be operated as a once-through biological treatment tank without biomass recycle. Effluent from the activated sludge system is sent to the tertiary treatment pond.

SANITARY WASTEWATER

Sanitary (domestic) wastewater is routed to the wastewater treatment system. A disinfection system using sodium hypochlorite follows secondary treatment.

TERTIARY TREATMENT

The tertiary treatment process consists of a Facultative Treatment Pond (Tertiary Treatment Pond, TTP). The TTP supports natural biological (anaerobic and aerobic) treatment. Prior to discharge through Outfall 001, the pH is adjusted by carbon dioxide injection, treatment chemicals are added for algal control (typically Azure Blue/Aquashade), and hydrogen peroxide my be injected for additional oxidation on an as needed basis.

WASTE MANAGEMENT

Recovered oil from API and Equalization are recycled back to the refinery. Solids (from any of the aforementioned units) and DNF float are sent to the Waste Oil Recovery Unit to process. Wasted sludge from secondary treatment is managed through the dewatering box system and disposed of off-site. Solids from Water Treatment Plant No. 2 are sent to Tract H West.

CLOSED SECTION OF TAYLOR BAYOU

Pump Station 311 (PS-311) pumps water from the Closed Section of Taylor Bayou (CSTB) to the inverted siphon discharge sump that discharges into the transport canal. From the transport canal, Pump Station 310 (PS-310) pumps the water to the TTP.

Stormwater from PS-15 is transferred to the suction sump of the inverted siphon and exits from the discharge sump into the transport canal. The water terminates at PS-310, where it is then pumped to the TTP. However, during heavy rainfall, the water from the inverted siphon suction sump overflows into the “150-Foot Weir” where water overflows into the CSTB. Also during heavy rainfall, water may overflow from the inverted siphon discharge sump into the CSTB. If rainfall is heavy, Outfall 005A may be opened to discharge water from the CSTB directly to Alligator Bayou.

CHEMICAL TREATMENT

In order to enhance treatment, the influent or effluent to any of the wastewater units may be injected with chemicals on an as-needed frequency. Treatment chemicals are also used in the cooling tower and boiler systems as well as in the water supply treatment system, which treats raw water from the Lower Neches Valley Authority to provide industrial water for the site. The type of treatment chemicals used in these systems depends on the particular treatment process/unit. Treatment chemicals used on-site typically include acids, anti-foamers, caustics (spent or fresh), coagulants, disinfectants, dyes, flocculants, settling agents, and/or polymers (anionic or cationic).

OUTFALLS

The facility has a main process wastewater Outfall 001, internal Outfall 101 following the secondary wastewater system, and several stormwater outfalls (004, 005A/B/C, 006, 008, 010, 011, 012, 013, 014). Wastewaters that are discharged through the outfalls are listed in Table 2.

OUTFALLS 001 AND 101

Outfall 001 discharges from the tertiary treatment pond into Taylor Bayou Tidal (Jefferson County Drainage District (JCDD) No. 7 Main Outfall Canal), which is a portion of the Intracoastal Waterway Tidal in Segment No. 0702 of the Neches-Trinity Coastal Basin.

Internal Outfall 101 is the discharge from the secondary wastewater treatment system and is located upstream of where the discharges from LS-310 and LS-319 tie into the conveyance pipe that discharges to the tertiary treatment pond.

STORMWATER OUTFALLS

Normally all stormwater is routed through the tertiary treatment pond; however, stormwater outfalls are used occasionally during and after rainfall events. These outfalls are 004, 005A/B/C, 006 ,008, 010, 011, 012, 013, and 014. Stormwater from industrial activity may be in contact with process and storage tank equipment and piping. Areas that could potentially contaminate stormwater are curbed or diked and contaminated stormwater is routed to the tertiary treatment pond.

In addition to stormwater, all of the stormwater outfalls may be used for the discharge of construction stormwater, hydrostatic test water, and certain allowable non-stormwaters. Small amounts of utility wastewaters that are commingled with stormwater may be discharged from Outfalls 004, 005A/B/C, and 010.

WATER SUPPLY

Raw water is supplied by the Lower Neches Valley Authority (LNVA), which the refinery treats to produce industrial water for its operations. The LNVA provides raw and treated water to municipal, industrial, and agricultural customers. The LNVA also operates a water treatment system for the production and distribution of potable water (Public Water Supply No. TX0360112).

The refinery has a firewater pump system with intake structure on Alligator Bayou to supply water to the refinery's fire-water header. The two pump diesel engines are each cooled with slipstreams that are taken from the water pumped from the firewater sump. The heated cooling water is discharged back into the pump sump, but only when the engines and pumps are operating. When the engines and pumps stop, the cooling water flow also ceases. When the pumps are operating the volume of intake water taken from the sump is such that there can be no discharge of cooling water to Alligator Bayou because flow is from the bayou into the firewater pump sump by way of a 60-inch pipe. Futhermore, the cooling water returns are located at the opposite end of the firewater

pump sump from the 60-inch inlet line with the pump suctions located in-between. Therefore, there is no discharge of diesel engine cooling water to Alligator Bayou during operation of the pumps. The volume of the intake water used to cool the engines is approximately 1% of the pumped intake flow (which is used for firewater pond makeup). Therefore, in accordance with 40 CFR 125.81 (a)(2), the intake structure is exempt from the cooling water intake structure (CWIS) rules at 40 CFR 125 Subpart I and the application requirements at 40 CFR 122.21(r).

THIRD PARTY WASTEWATERS

Wastewaters received from other facilities for treatment at the Valero Port Arthur Refinery are summarized in Table 3.

EFFLUENT GUIDELINES

National effluent guidelines for Petroleum Refining at 40 CFR 419 Subchapter C Petrochemical apply to process wastewaters at the Valero Port Arthur Refinery. These guidelines apply to refineries with petrochemical operations where at least 15 percent of refinery production is first-generation petrochemicals and isomerization products. Refining production levels applicable to the guidelines are shown in Table 4.

DGD wastewaters that are routed to the Valero WWTU No. 8742 and discharged through Valero's Outfall 001 under TPDES WQ0000309000 are not subject to 40 CFR 437 (Centralized Waste Treatment) because they met certain exceptions. Wastewaters that are generated at the DGD facility would not be off-site sources (40 CFR 437.1(a)(1)) because DGD operations is located within the boundaries of the Valero Port Arthur Refinery. As such, DGD's wastewaters would be considered on-site, not off-site sources (40 CFR 437.2(n) and (q)). Even if DGD were an off-site facility, its wastewaters would be exempted per §437.1(b)(2) (being of a similar nature and compatible with Valero's treatment system) and §437.1(b)(3) (wastewaters received via conduit). Off-site wastewaters that are received from GT Omniport associated with terminal services for DGD feedstocks/products are not subject to §437 because they would meet §437.1(b)(2) (being of a similar nature and compatible with Valero's treatment system).

DGD classifies its renewable fuels production process under SIC 2869 (Industrial Organic Chemicals, Not Elsewhere Classified). Effluent guidelines at 40 CFR 414 (Organic Chemicals, Plastics, and Synthetic Fibers, OCPSF) normally cover facilities under SIC 2869; however, there is an exception at §414.11(e) for process wastewater from the manufacture of organic chemical compounds solely by extraction from plant and animal raw materials.

Table 1. Wastewater Treatment Units

Pretreatment – Sour Water Sour Water Stripper 8746 (T-701) – 8'[D] x 94'[H] Sour Water Stripper 8747 (T-801) – 9'[D] x 132'[H] Sour Water Stripper 8748 (T-901) – 9'[D] x 135'[H] Sour Water Stripper 8749 (T-1001) – 6'[D] x 134'[H]
Pretreatment – Desalter Effluent Reactor Tanks (TK-8020/8070)* – Each at 7.25'[W] x 30.75'[L] x 10'[H] Clarification (L-8000/8020)* – Each at 33'[D] x 9'[H] Wet Surface Air Cooler (C-8000) – 20.4'[W] x 23.3'[L] x 15.2'[H] Clarifier Effluent Stand Pipe (D-8000)* – 6'[D] x 20'[H] Oil Transfer Tank (TK-8000)* – 5'[D] x 6.5'[H]
Pretreatment, Regenerate Effluent Neutralization Tank (TK-3500/3600) – Each at 40'[W] x 40'[L] x 17'[H]
Pretreatment – Surface Drainage Pump Station 15 Surface Drainage Tank (TK-1912) – 102'[D] x 40'[H]
Primary Treatment API Separation (L-1010/1020/1030)* – Each at 20'[W] x 135'[L] x 6'[H] API Effluent Tanks (L-1110/1120) – Each at 35'[D] x 16'[H] Equalization (L-2010) –150'[D] x 20'[H] Flocculation (L-3010)* – 20'[D] x 20'[H] Dissolved Nitrogen Flotation (L-3110/3120)* – Each at 60'[D] x 10'[H] Dissolved Nitrogen Flotation Effluent Tanks (L-3310/3320) – Each at 35'[D] x 18'[H] Dissolved Nitrogen Flotation Pressurization Tanks (D-3410/3420) – Each at 8'[D] x 13'[H]
Secondary Treatment (Activated Sludge) Aeration (L-5010*/5020) – 115'[D] x 40'[H] Flow Splitting Tank (L-6002) – 16'[D] x 25'[H] Clarification (L-6010/6020 and T-2554) – Two at 150'[D] x 15'[H], and one at 140'[D] x 11'[H] Scum Transfer Tanks (L-6005/1502) – One at 12'[D] x 18'[H], and one at 4'[D] x 12'[H] Clarifier Effluent Transfer Tank (L-6110) – 40'[D] x 12'[H]
Disinfection Sodium Hypochlorite Storage Tanks (TK-150/1501)
Waste Management API Skim Oil Transfer Tank (L-1210) Skim Oil Tank (L-1310) Solids Thickening Tank (L-1410) DNF Float Tank (L-3210) Waste Oil Recovery Tanks (TK-1790/1791) Tract H West Dewatering Boxes
Tertiary Treatment Facultative Treatment Pond – 562 Acres
Vapor Control Equipment Regenerative thermal oxidizer *Units marked above (*) have emissions controlled by the regenerative thermal oxidizer

Table 2. Outfall Wastewaters

Outfall	Wastewaters	Daily Average Flow	
		gpm	MGD
001	Wastewaters subject to effluent guidelines at 40 CFR 419, Subcategory C*		
	Refinery wastewater (process, utility)	6,005	8.647
	Ballast water	50	0.072
	Crude tank drawoff	100	0.144
	Boiler blowdown	475	0.684
	Primary process area stormwater	641	0.924
	Other wastewaters**		
	Stormwater from other areas	15,098	21.741
	Hydrogen plant utility wastewaters	38	0.055
	Sanitary	110	0.158
	Water treatment	400	0.576
	Total	22,917	33.000
004, 005A/B/C, 010	Stormwater (including construction stormwater), utility wastewater, hydrostatic test water	Intermittent and variable	
006, 008, 011, 012, 013, 014	Stormwater (including construction stormwater), hydrostatic test water	Intermittent and variable	

* Includes remediation wastewater, and wastewater from Chevron Phillips as part of petrochemical operations under refinery effluent guidelines.
** Includes other third party wastewaters.

Table 3. Third Party Wastes

Last Updated: July 19, 2024		
Name and Address	**Description of the relationship of waste sources with facility activities and sources of wastewater**	**Compatibility with onsite wastes**
Chevron Phillips Chemical Company, LP Port Arthur Plant 2001 South Gulfway Drive Port Arthur, TX 77641-1547	The facility is located within Valero's refinery complex. Products manufactured include ethylene and cyclohexane, which are used as feedstock for the production of plastics and/or for direct usage. Wastewater is generated from the production process and stormwater. Wastewaters from the facility are included under refining effluent guidelines at 40 CFR 419, Subpart C, which covers petrochemical operations. The average wastewater discharge is approximately 1.2 MGD (cooling tower blowdown 0.5 MGD, process wastewater/stormwater 0.8 MGD).	Wastes are compatible with refinery wastewaters and stormwater and the on-site treatment system.
Chevron/Texaco Global Lubricants P.A. Lubricants Plant End of West 7th Street, Gate 1 P.O. Box G Port Arthur, TX 77641	The facility blends, manufactures (occasionally using pressure and heat), and packages lubes and greases. Its primary SIC code is 2992. Wastewater includes process wastewater, stormwater (non-process and process areas), and sanitary wastewater. Some wastewater (hydrocarbon phase) is removed from sumps and brought by vacuum trucks to the Waste Oil Recovery Unit (WORU) owned and operated by Veolia Waters.	Wastes are compatible with refinery wastewaters and stormwater and the on-site treatment system.
Air Products and Chemicals, Inc. 1801 South Gulfway Drive Port Arthur, TX 77640	The facility is located within Valero's refinery complex. Hydrogen is produced by two methods: purification of a gas stream from the refinery and the steam methane reforming process (separate from the refining process). No process wastewaters are generated. Utility wastewaters include cooling tower blowdown (14 gpm; 20,160 gpd) and regenerant streams from the reverse osmosis unit (24 gpm; 34,560 gpd). Sanitary wastewater (5 gpm; 7,200 gpd) and stormwater are also generated (flow variable). Effluent guidelines for inorganic chemical production (Subparts AG and AO) are potentially applicable to the operations; however, because no process wastewater is generated, these guidelines do not apply.	Wastes are compatible with other refinery utility wastewaters and stormwater and the on-site treatment system.
Linde 1801 South Gulfway Drive Port Arthur, TX 77640	The facility produces hydrogen and is located within Valero's refinery complex. No process wastewaters are generated. Utility wastewaters include cooling tower blowdown and condensate blowdown. Sanitary wastewater and stormwater are also generated (flow variable).	Wastes are compatible with refinery wastewaters and stormwater and the on-site treatment system.
Valero Partners Port Arthur, LLC (VLP) 1801 South Gulfway Drive Port Arthur, TX 77640	VLP is a subsidiary of Valero Energy Partners L.C (VLP) and purchased assets including petroleum storage tanks and related pipeline facilities from the Valero Port Arthur Refinery. As such, the transferred assets may periodically generate, contain or manage contributing waste streams such as stormwater runoff, steam condensates, hydrostatic testing and fire waters.	Wastes are compatible with refinery wastewaters and stormwater and the on-site treatment system.
DELEK Refining, Longview, TX Valero Lucas Terminal Valero El Vista Tank Farm Colonial PA Products Station Any Valero refinery Potentially any other refinery Valero PI Docks	Secondary oil-bearing residuals are received from various off-site facilities, including other Valero refineries. These residuals are treated on-site in the Waste Oil Recovery Unit (WORU) owned and operated by Veolia Waters.	Wastes are compatible with other refinery wastes and wastewaters and the on-site treatment system.

Table 3. Third Party Wastes

Last Updated: July 19, 2024		
Name and Address	**Description of the relationship of waste sources with facility activities and sources of wastewater**	**Compatibility with onsite wastes**
Diamond Green Diesel LLC 2275 West Reverend Dr. Ransom Howard Street Port Arthur, TX 77640	Diamond Green Diesel LLC is located within Valero's refinery complex. DGD is the operating subsidiary of Diamond Green Diesel Holding LLC, a joint venture formed by Diamond Alternative LLC (a wholly owned subsidiary of Valero Energy Corporation) and Darling Green Energy LLC (a wholly-owned subsidiary of Darling Ingredients Inc.). DGD converts waste grease, animal fats (e.g., tallow products from food processors), used cooking oils and other plant and vegetable oils into renewable fuel products, including diesel renewable naphtha/gasoline, renewable liquid petroleum gases (LPG)/propane, and light end gases (LEG). Wastewaters include process wastewaters utility wastewaters, domestic wastewater, and stormwater. The average wastewater that is routed to the Valero Refinery wastewater treatment system is approximately 400 gpm average, 680 gpm peak. Stormwater that is not routed to the Valero refinery wastewater treatment system may be discharged to the refinery's Outfalls 004, 005A, and 005B.	Wastes are compatible with refinery wastewaters and stormwater and the on-site treatment system.
GT Logistics LLC (an operating subsidiary of Howard Energy Partners) GT Omniport 1998 Highway 73 West Port Arthur, TX 77640	GT Omniport provides terminal services for feedstocks (grease, fats and oils) for the Diamond Green Diesel facility. Wastewaters associated with the DGD material handling include condensates, other wastewaters, and stormwater. Estimated flows are 37 gpm average, 90 gpm peak. Wastewater will be trucked to the DGD wastewater treatment system; treated effluent will be routed to the Valero refinery wastewater treatment system.	Wastes are compatible with refinery wastewaters and stormwater and the on-site treatment system.

Table 4. Refining Production Levels

Process	Production Capacities (thousand barrels per stream day, MBSD)	
	Typical	Design
Crude Processes		
Atmospheric Crude Distillation	405	430
Crude Desalting	405	430
Vacuum Crude Distillation	202	250
Cracking and Coking Processes		
Fluid Catalytic Cracking	75	80
Hydrocracking	130	135
Delayed Coking	145	160
Hydrotreating	312	358
Reforming and Alkylation Processes		
Catalytic Reforming	55	58

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

FACILITY IDENTIFICATION:

THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN
Dept: Port Arthur Refinery
Physical Address: 1801 S GULFWAY DR, PORT ARTHUR, TX 77640-4416
Mailing Address: PO BOX 909, PORT ARTHUR, TX 77641-0909
Geographic Location: Main Administration Building is located on the corner of Hwy 82 and Hwy 87. Refinery lies on the North and South side of Hwy 87, East of Hwy 82.
County: JEFFERSON
Latitude: 29.865
Longitude: -93.9635
Fire Department: Port Arthur Fire Department
LEPC: Jefferson LEPC

[x] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: 199623414
NAICS: 324110 (Petroleum Refineries)

RMP: 100000116634 (RMP Facility ID)
TRI: 77640CLRKR1801S (TRI Facility ID)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 7500

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [x] Yes [ ] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [x] Yes [ ] No

CONTACT INFORMATION:

Amber Hanning
Organization: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARHTUR REFINERY
Title: ASSOCIATE HEALTH, ENVIRONMENTAL AND SAFETY TECH
Contact Type(s): BILLING CONTACT
Address: PO BOX 909, PORT ARTHUR, TX, 77641
Phones: Work Phone: 409-985-1031
Email: MIMI.HANNING@VALERO.COM

Clint Mitchell
Organization: THE PREMCOR REFINING GROUP INC.
Title: DIRECTOR ENVIRONMENTAL/SAFETY AFFAIRS
Contact Type(s): OWNER / OPERATOR
Address: 1801 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 979-218-9489 Work Phone: 409-985-1659
Email: CLINT.MITCHELL@VALERO.COM

Marcus Campbell
Organization: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFINERY
Title: FIRE CHIEF/EMERGENCY SERVICES SUPT.
Contact Type(s): FAC. EMERGENCY COORDINATOR
Address: PO BOX 909, EMERGENCY SERVICES, PORT ARTHUR, TX, 77641
Phones: Work Phone: 409-985-1200
Email: MARCUS.CAMPBELL@VALERO.COM

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Bruce King
Organization: VALERO PORT ARTHUR REFINERY
Title: EMERGENCY SERVICES SUPERINTENDENT
Contact Type(s): EMERGENCY CONTACT, FAC. EMERGENCY COORDINATOR, SAFETY MANAGER
Address: 1801 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: 24-Hour: 409-985-1265 Cell Phone: 281-541-7353 Emergency: 409-985-1265 Work Phone: 409-985-1212
Email: BRUCE.KING@VALERO.COM

Jacob Stanton
Organization: THE PREMCOR REFINING GROUP INC
Title: SAFETY ENGINEER
Contact Type(s): SUBMITTER, TIER II INFORMATION CONTACT
Address: 1801 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 412-915-5653 Work Phone: 409-985-1618
Email: JAKE.STANTON@VALERO.COM

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **Topguard 1156**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 60,696 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 147

Amount: 2600 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 146
Amount: 2600 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: 24000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CLS 3111T Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 52,536 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 42,536 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 21,268 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU T-35A
Amount: 21268 pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU T-35B
Amount: 21268 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Axens HR 1246 Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 65% Wt, Max Amt Code:
[ ] EHS, CAS: 1307-96-6, Component: COBALT (II) OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 25% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 165,375 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 165,375 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241 GFU D-101
Amount: 165375 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

No additional chemical information is required by Texas

CHEMICAL NAME: **Axens HR 856S Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1317-42-6, Component: COBALT (II) SULFIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1317-33-5, Component: MOLYBDENUM (IV) SULFIDE, 9% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 85% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 61,162 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 61,162 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 245 GFU - R-3100
Amount: 61162 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 132 Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 70% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL OXIDE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 15123-80-5, Component: ALUMINUM MOLYBDENUM OXIDE, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 28,204 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 28,204 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1000
Amount: 28204 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CENTERA(R) CATALYST DN-3636**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 188,536 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 188,536 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301B
Amount: 94268 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301A
Amount: 94268 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe Tk-439 Catalyst**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 08/29/2023, REASON: Replaced catalyst with AT730G in reactor

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 100% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 183,600 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: 183,600 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 240

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 843 DCU - R-9650

Amount: 183600 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Alcoa Activated Alumina HF 2000**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 95% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 100,800 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 108,000 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 443 HFAU- Deflourinator
Amount: 96800 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **ALBEMARLE(R) NEBULA 20 CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: SILICON DIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-35-8, Component: TUNGSTEN (VI) OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 30% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 96,383 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Average Daily Amount: 96,383 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 246 DHT - R-3000
Amount: 96383 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Criterion DN-3622 Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 1,673,574 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: 1,320,446 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: 816,114 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-1
Amount: 504332 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU R-2
Amount: 816114 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Suez Klaraid(R) PC1192**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 26062-79-3, Component: N,N-DIMETHYL-N-2-PROPENYL-2-PROEN-1-AMONIUM CHLROIDE HOMOPOLYMER, 20% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 282,188 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 192,855 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: #2 Water Treating Plant, 34, 35 Pump Houses
Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-711**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 90% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 6,000 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 6,000 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 3,600 pounds
No. days on-site: 208

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-101
Amount: 2400 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-201
Amount: 3600 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-831**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 87% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 3% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 6,200 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 6,200 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 3,800 pounds
No. days on-site: 208

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-201
Amount: 3800 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-101
Amount: 2400 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **Axens ACT 072**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 25% Wt, Max Amt Code:
[ ] EHS, CAS: 1305-78-8, Component: CALCIUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 12136-45-7, Component: DIPOTASSIUM OXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1309-48-4, Component: MAGNESIUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: SILICON DIOXIDE (AMORPHOUS), 68% Wt, Max Amt Code:
[ ] EHS, CAS: 13463-67-7, Component: TITANIUM DIOXIDE, 2% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 4,570 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: 4,507 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 2,417 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU 844 R-3001
Amount: 646 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU 844 R-3002
Amount: 1507 pounds

[ ] Confidential
Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GFU 245 R-1100
Amount: 2417 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-453 SIliconTrap**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 80% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 7% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 3% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 90,709 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 90,709 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: 54,000 pounds
No. days on-site: 208

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-101
Amount: 36709 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: GOHT-244 M-201
Amount: 54000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-773**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 75% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 4,500 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: 4,500 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 4,500 pounds
No. days on-site: 208

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-101
Amount: 4500 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Axens ACT 068**

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 25% Wt, Max Amt Code:
[ ] EHS, CAS: 1305-78-8, Component: CALCIUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 12136-45-7, Component: DIPOTASSIUM OXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1309-48-4, Component: MAGNESIUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: SILICON DIOXIDE (AMORPHOUS), 68% Wt, Max Amt Code:
[ ] EHS, CAS: 13463-67-7, Component: TITANIUM DIOXIDE, 2% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 4,504 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: 4,504 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 2,333 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU 844 R-3001
Amount: 631 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU 844 R-3002
Amount: 1540 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: GFU 245 R-1100
Amount: 2333 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies AT730G**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 15123-80-5, Component: ALUMINUM MOLYBDENUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 85% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1335-30-4, Component: AMORPHOUS ALUMINIUM SILICATE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: DIALUMINIUM NICKEL TETRAOXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL TETRAOXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 165,100 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 165,100 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 165,100 pounds
No. days on-site: 124

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU-843 R-9650
Amount: 165100 pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-26 TopTrap**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 80% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: PRECIPITATED AMORPHOUS SILICA, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 1,800 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: 1,800 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 1,080 pounds
No. days on-site: 208

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-101
Amount: 720 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GOHT-244 M-201
Amount: 1080 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **Axens ACT 070**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 12136-45-7, Component: DIPOTASSIUM OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1309-48-4, Component: MAGNESIUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: SILICON DIOXIDE (AMORPHOUS), 68% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 25% Wt, Max Amt Code:
[ ] EHS, CAS: 13463-67-7, Component: TITANIUM DIOXIDE, 2% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 5,208 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 5,208 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 2,333 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU 844 R-3001
Amount: 705 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU 844 R-3002
Amount: 2170 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: GFU 245 R-1100
Amount: 2333 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 180NM4**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 40% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 15123-80-5, Component: ALUMINUM MOLYBDENUM OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1318-02-1, Component: ZEOLITES, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1335-30-4, Component: AMORPHOUS ALUMINIUM SILICATE , 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-35-8, Component: TUNGSTEN TRIOXIDE , 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 599,400 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 599,400 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: 599,400 pounds
No. days on-site: 295

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: HCU-942 R-1001
Amount: 599400 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 1001**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 107-21-1, Component: ETHYLENE GLYCOL, 5% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: AMMONIUM MOLYBDENUM TUNGSTEN NICKEL HYDROXIDE MALEATE, 95% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 113,400 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 113,400 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 93,600 pounds
No. days on-site: 295

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: HCU-942 R-2000
Amount: 19800 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: HCU-942 R-1000
Amount: 93600 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **Axens HR 945 S**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDIC ANHYDRIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 75% Wt, Max Amt Code:
[ ] EHS, CAS: 12035-72-2, Component: TRINICKEL DISULFIDE, 7% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 49,450 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 49,450 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 49,450 pounds
No. days on-site: 335

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU-844 R-3001
Amount: 49450 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-592 HyBRIM**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1303-86-2, Component: DIBORON TRIOXIDE, 3% Wt, Max Amt Code:

[ ] EHS, CAS: 7782-42-5, Component: GRAPHITE (NATURAL), 2% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 1% Wt, Max Amt Code:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 70% Wt, Max Amt Code:

[ ] EHS, CAS: 1307-96-6, Component: COBALT OXIDE, 4% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 20% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 207,000 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: 207,000 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: 123,000 pounds

No. days on-site: 208

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: GOHT-244 M-201

Amount: 123000 pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: GOHT-244 M-101

Amount: 84000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 252**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 35% Wt, Max Amt Code:
[ ] EHS, CAS: 1335-30-4, Component: AMORPHOUS ALUMINIUM SILICATE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: DIALUMINIUM NICKEL TETRAOXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: POLYCARBOXYLIC ACID, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-35-8, Component: TUNGSTEN TRIOXIDE, 35% Wt, Max Amt Code:
[ ] EHS, CAS: 1318-02-1, Component: ZEOLITES, 2% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 129,990 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 129,990 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 129,990 pounds
No. days on-site: 295

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: HCU-942 R-2000
Amount: 129990 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 186 Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 60% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 15123-80-5, Component: ALUMINUM MOLYBDENUM OXIDE, 2% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 34,092 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 34,092 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1000
Amount: 34092 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Axens HR-845 Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 70% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL(II) OXIDE, 15% Wt, Max Amt Code:
PHYSICAL HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 200,966 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 200,966 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 200,966 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 245 GFU - R-1100
Amount: 199863 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **METHYLDIETHANOLAMINE**
CAS #: 105-59-9 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 105-59-9, Component: METHYLDIETHANOLAMINE, 100% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 88,960 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 47,747 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 546 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1242 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241-2-3 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 545 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 7042, 7043, 7044 FGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 942 HCU
Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ALBERMARLE(R) KF-907 CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM ORTHOPHOSPHATE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 60% Wt, Max Amt Code:
[ ] EHS, CAS: 1307-96-6, Component: COBALT OXIDE (COO), 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 346,568 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 346,568 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M-201
Amount: 254415 pounds

[ ] Confidential

Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GUF - M-101
Amount: 92153 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CRITERION- SENTRY(R) MaxTrap [Ni,V] CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 80% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 55,241 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 55,241 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-1
Amount: 55241 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **SUEZ INHIBITOR AZ8104**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: DICHLOROTOLYLTRIAZOLE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 64665-57-2, Component: SODIUM 4(OR 5)-METHYL-1H-BENZOTRIAZOLIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 202420-04-0, Component: CHLOROTOLYLTRIZAOLE SODIUM SALT, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 12,496 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 9,651 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 136 A/B CWT'S
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 233 CWT

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 244 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241, 2, 3 GFU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 245 GHU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 246 DHT
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ALBERMARLE KF-647 TOTSUCAT**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 65% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 15% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 10% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 171,391 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 171,391 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M-101
Amount: 16627 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M-201
Amount: 24421 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 246 DHT - R-3000
Amount: 130343 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CLS Zeolyte Chloride Guard XO 3101d**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 29,781 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)

Average Daily Amount: 29,781 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)

Maximum amount in largest container: 29,781 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 1344 CRU - T-35A

Amount: 29781 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CLS Zeolyte Chloride Guard NB 3202**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 27,167 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 27,167 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Merichem T-35A
Amount: 27167 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies GSK-10 Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 97% Wt, Max Amt Code:
[ ] EHS, CAS: 1302-93-8, Component: MULLITE, 3% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 21,780 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 21,780 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1000
Amount: 21780 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Criterion- ASCENT(R) DN-3552 TL Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 60% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:
[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:
[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 358,527 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 358,527 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 119,509 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-1
Amount: 119509 pounds

[ ] Confidential

Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-2
Amount: 119509 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-3
Amount: 119509 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CENTERA Catalyst DC-2635**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 1307-96-6, Component: COBALT OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 30% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 532,612 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 532,612 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301A
Amount: 266306 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301B
Amount: 266306 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ALBEMARLE(R) KF-868 CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM ORTHOPHOSPHATE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1303-86-2, Component: BORON OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 111-46-6, Component: DIETHYLENE GLYCOL, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 40% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL(II) OXIDE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 327,319 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 327,319 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 246 DHT - R-3000
Amount: 327319 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Light Catalytic Cracked Naphtha**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 29,503,125 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 12,221,188 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 29,503,125 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-77
Amount: 17863087 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Axens ACT 979S Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 75% Wt, Max Amt Code:
[ ] EHS, CAS: 12035-72-2, Component: NICKEL SUBSULFIDE, 25% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 31,840 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 31,804 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 245 GFU R-3100
Amount: 31840 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 514**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 2% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] EHS, CAS: , Component: POLYCARBOXYLIC ACID, 10% Wt, Max Amt Code:

[ ] EHS, CAS: , Component: POLYCARBOXYLIC ASID, NICKEL SALT, 2% Wt, Max Amt Code:

[ ] EHS, CAS: 1335-30-4, Component: SYNTHETIC, AMORPHOUS ALUMINIUM SILICATE, 5% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 386,192 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 386,192 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 323,232 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU - R-30
Amount: 2060 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1000
Amount: 323232 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU -R-1001
Amount: 60900 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-437 Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 89% Wt, Max Amt Code:
[ ] EHS, CAS: 1303-86-2, Component: DIBORON TRIOXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 7% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 26,659 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 26,569 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU - R-9600
Amount: 26569 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-10**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 25% Wt, Max Amt Code:
[ ] EHS, CAS: 1305-78-8, Component: CALCIUM OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1302-67-6, Component: SPINEL (MG(AI02)2), 73% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 7,587 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 7,587 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 2,866 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241 GFU D-101
Amount: 2866 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU R-9600
Amount: 1004 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GFU-244 M-101
Amount: 1433 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GFU-244 M-201
Amount: 2284 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-709**
CAS #: UNKNOWN EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 94% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 6% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 6,350 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 6,047 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 4,350 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241 GFU D-101
Amount: 4350 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU R-9600
Amount: 1697 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Macrotrap Guard Bed**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 13,000 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: 13,000 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: 13,000 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 942 HCU

Amount: 13000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Sulfix 9240 Scavenger**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Skin corrosion or irritation [ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: 5,000 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: STF
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NSTF
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PS 162, 163
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 47 Pump House
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Innospec- OLI-8000**
CAS #: 61790-12-3 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 61790-12-3, Component: TALL OIL, FATTY ACID, 100% Wt, Max Amt Code:
PHYSICAL HAZARDS:
[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 152,410 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 105,181 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Docks
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Sabine Road Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **HYDROGEN**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Skin corrosion or irritation [ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 18,989 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 15,308 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 246 DHT
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 245 GHU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241-3 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 7945 SGRU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Lanxess MonoPlus MP800**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 15,384 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 15,384 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: #2 Water Treating Plant
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Criterion OptiTrap Ring HC**
CAS #: UNKNOWN EHS:

[x] Identical to previous year

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 80% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 20,309 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 20,309 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301A
Amount: 2367 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301B
Amount: 2367 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-1
Amount: 8241 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 943 HCU - R-2
Amount: 3667 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-3
Amount: 3667 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Axens ACT 901 Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 100% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 95,256 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 95,256 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU-844 R-3002
Amount: 95256 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

No additional chemical information is required by Texas

CHEMICAL NAME: **MODIFIED AMMONIUM POLYSULFIDE - MAPS**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 12259-92-6, Component: Ammonium Polysulfide, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 1336-21-6, Component: AMMONIUM HYDROXIDE, 25% Wt, Max Amt Code:
[x] EHS, CAS: 7664-41-7, Component: AMMONIA, 20% Wt, Max Amt Code: 05
[ ] EHS, CAS: , Component: Organic Amines (proprietary), 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 33,646 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 27,826 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Lanxess MonoPlus MP68**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 11,193 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 11,193 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: #2 Water Treating Plant
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Suez STEAMATE(R) LSA1901**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 108-01-0, Component: DIMETHYLAMINOETHANOL, 40% Wt, Max Amt Code:
[ ] EHS, CAS: 5332-73-0, Component: METHOXYPROPYLAMINE, 3-, 40% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 2,850 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)

Average Daily Amount: 2,456 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 15 BOILER HOUSE

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **AMMONIUM HYDROXIDE SOLUTION**

CAS #: 1336-21-6 EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 09 (75,000 - 99,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: #2 WATER TREATING PLANT

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 146 AVU

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 1242 SGRU

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **SULPHURIC ACID 77-100%**

CAS #: 7664-93-9 EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 681,740 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 539,838 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: #2 WATER TREATING PLANT
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: 40600 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **PERCHLOROEHTYLENE 235**
CAS #: 127-18-4 EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CERAMIC CATALYST SUPPORT BALLS**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 34% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: SILICA, AMORPHOUS, 65% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 783,712 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 783,712 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: 147,590 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU - R-9600
Amount: 6120 pounds

[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-2
Amount: 147590 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-3
Amount: 147590 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Merichem - T-35A
Amount: 8453 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU R-31
Amount: 11232 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1
Amount: 147590 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU R-301 B
Amount: 10003 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M-201
Amount: 43685 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU - R-9650
Amount: 23590 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: 243 GFU R-301 A
Amount: 10003 pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU - R-30
Amount: 8332 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241 GFU - D-101
Amount: 8245 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 242 GFU - D-101
Amount: 12365 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M-101
Amount: 19292 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Merichem - T-35B
Amount: 7931 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 245 GFU - R-1100
Amount: 27612 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 245 GFU - R-3100
Amount: 63396 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 246 DHT - R-3000
Amount: 80683 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **RB-2000 INDUSTRIAL SOAP**
CAS #: UNKNOWN EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 0111-76-2, Component: GLYCOL ETHER, 4% Wt, Max Amt Code:
[ ] EHS, CAS: 127087-87-0, Component: NONIONIC SURFACTANT, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1310-73-2, Component: SODA, CAUSTIC, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 4,100 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: 4,007 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 8742 WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: CHEMICAL CLEANING STATION
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 244 GFU
Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NORTH SOUTH TANK FIELD
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SABINE ROAD TANK FARM
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1242 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 41 PUMP HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 541-4 SRU'S
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **RB-1500 INDUSTRIAL SOAP**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 13,440 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 5,633 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 18 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241,2,3,5 GFU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 8742 WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: DOCKS
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: GARAGE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1242 SGRU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CAUSTIC POTASH LIQUID (ALL GRADES)**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-58-3, Component: POTASSIUM HYDROXIDE, 51% Wt, Max Amt Code:
[ ] EHS, CAS: 7732-18-5, Component: WATER, 49% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[x] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 190,620 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 141,407 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk 804
Amount: 10444179 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK 938
Amount: 9561218 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 443 ALKYLATION UNIT
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 16 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 18 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Plant Wide
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **UOP R-274 CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 70,000 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)

Average Daily Amount: 70,000 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 1344 CRU

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **THUNDERSTORM ATC FORMULA F-601A (FIREFIGHTING FOAM)**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[x] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 137,047 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 137,047 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: FIRE STATION
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Central Shop
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Plant Wide
Amount: N/A pounds

[ ] Confidential
Container Type: Plastic Or Non-Metallic Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Plant Wide
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **NITROGEN**
CAS #: 7727-37-9 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 13,746,794 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 10,381,115 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: SABINE ROAD TANK FARM
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: CENTRAL SHOP
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 1242 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 241,2,3,5 GFU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions

Location: 244 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 443 ALKYLATION UNIT
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 541-4 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 545 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 942 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 1344 CRU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **REFINERY FUEL GAS**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Aspiration hazard

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 15,000 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 12,000 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 18 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1242 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241,2,3,5 GFU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GAS METERING STATION, NECHES
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 443 ALKYLATION UNIT
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU

Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 15 BOILER HOUSE
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CARBON DIOXIDE**
CAS #: 124-38-9 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 307,660 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 104,768 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 8742 WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Less Than Ambient Temperature (not Cryogenic)
Location: FIRE STATION
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **PETROLEUM COKE**
CAS #: 64741-79-3 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[x] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 3,722,531,400 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 3,722,531,400 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Steel Drum
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: COKE PILE
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: DOCKS
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Slop Oil**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 26,464,493 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 14,950,986 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 163 PUMP HOUSE
Amount: N/A pounds

[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NECHES PUMP STATION
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SABINE ROAD TANK FARM
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 443 ALKYLATION UNIT
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 541-4 SRU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241,2,3,5 GFU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 244 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 8742 WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 BOILER HOUSE
Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 16 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 18 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1242 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-151
Amount: 15668905 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-1790
Amount: 2415156 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk1791
Amount: 1213141 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-2145
Amount: 8331526 pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ACTIVATED CARBON**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 20,000 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 15,000 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Plant wide on process sewer filtration systems.
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SOUR WATER**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 19,147,794 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 4,467,648 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: 11,485,424 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NORTH SOUTH TANK FIELD
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 541-4 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 18 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1242 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 8742 WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 2444 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241,2,3,5 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-2588
Amount: 1728128 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-2590
Amount: 1875569 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-78
Amount: 4553536 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-88
Amount: 2425039 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Versene 100**
CAS #: UNKNOWN EHS:

[x] Identical to previous year

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 29,840 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 29,840 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 Boiler House
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 18 Boiler House
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CAUSTIC SODA Solution**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 51% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] EHS, CAS: 1313-60-6, Component: SODIUM OXIDE (NA2O2), 40% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 3,240,000 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Average Daily Amount: 1,636,000 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: North South Tank Field

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 443 HFAU

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Plant Wide

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **DIETHANOLAMINE 85%**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 45,000 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 36,000 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1242 SGRU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **GAS/SPEC SS-SOLVENT (MDEA)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 269,880 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 132,247 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PLANT WIDE
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 7843 ATU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 7945 SGRU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **ISOBUTANE**

CAS #: 75-28-5 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 7,293,273 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: 5,125,753 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: 7,293,273 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: TK2156
Amount: 7293273 pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: 443 HFAU - HF Alky Unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **BUTANE/BUTYLENE MIXTURE**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 75-28-5, Component: ISOBUTANE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 106-97-8, Component: BUTANE, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 106-99-0, Component: 1,3-BUTADIENE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 25167-67-3, Component: BUTYLENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 115-07-1, Component: PROPYLENE, 1% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Aspiration hazard

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 8,290,035 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: 3,652,976 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: 6,257,553 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: TK2473
Amount: 908283 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: TK2155
Amount: 6257553 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: TK2475
Amount: 1105962 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **COKER GAS OIL**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 32,951,033 pounds Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: 10,538,106 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: 32,951,033 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: TK0889

Amount: 34106186 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **VACUUM TOWER BOTTOMS/ DECOKER CHARGE**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 51,135,647 pounds Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: 28,785,813 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: 25,971,431 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Tank 108
Amount: 25971431 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 147 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk 109
Amount: 25164217 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **KEROSENE**
CAS #: 8008-20-6 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 199,643,224 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 75,409,966 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 113,823,924 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SABINE ROAD TANK FIELD
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GFU 241
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 7945 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-1848
Amount: 30055081 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-2105
Amount: 35124384 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-2106
Amount: 113823924 pounds

[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-2113
Amount: 20639835 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **LIGHT CYCLE OIL**
CAS #: 64741-59-9 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 30,766,492 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 14,468,181 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 30,766,492 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-1850
Amount: 30766492 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **LIGHT STRAIGHT RUN GASOLINE**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 21,568,596 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 2,973,538 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: 17,965,542 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk2591
Amount: 3582051 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-2112
Amount: 21003 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK 2159
Amount: 17965542 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **OXYGEN**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 4,011,254 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Average Daily Amount: 1,898,798 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: PLANT WIDE

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **FLY ASH**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Skin corrosion or irritation
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 64,000 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 24,000 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 16 BH
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 BH
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **GASOLINE BLENDSTOCK**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 247,409,243 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 136,987,961 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Maximum amount in largest container: 39,287,292 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2117
Amount: 22114277 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2132
Amount: 20332321 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2133
Amount: 35277230 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2137
Amount: 38435921 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2111
Amount: 35562109 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2160
Amount: 39287292 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2161
Amount: 38726367 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF Tk-2148
Amount: 17673726 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

No additional chemical information is required by Texas

CHEMICAL NAME: **RB-5000 Cleaner**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 15,600 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 8,018 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 147 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **Lifespan 3301R**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 8,791 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 4,795 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes Sulfix(R) 9240Scavenger**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 107-22-2, Component: GLYOXAL, 40% Wt, Max Amt Code:
PHYSICAL HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 5,697 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 1,177 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NTF
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: STF
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Excalibur 7760**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: ORGANIC ACID, 100% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 86,424 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 32,145 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 147
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 146
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes Tolad 249 Fuel Additive**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

MIXTURE COMPONENTS:

[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 25% Wt, Max Amt Code:

[ ] EHS, CAS: 108-67-8, Component: 1,3,5-TRIMETHYLBENZENE, 10% Wt, Max Amt Code:

[ ] EHS, CAS: , Component: ALKYLCARBOXYLIC ACID, 20% Wt, Max Amt Code:

[ ] EHS, CAS: 64742-95-6, Component: LIGHT AROMATIC NAPHTHA, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 100-41-4, Component: ETHYL BENZENE, 1% Wt, Max Amt Code:

[ ] EHS, CAS: 98-82-8, Component: CUMENE, 1% Wt, Max Amt Code:

[ ] EHS, CAS: 526-73-8, Component: 1,2,3-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 26,406 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)

Average Daily Amount: 16,002 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: South Chem Slab

Amount: N/A pounds

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: SRTF

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Xeric 7020 Heavy Oil Demulsifier**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 64742-95-6, Component: LIGHT AROMATIC NAPHTHA, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 526-73-8, Component: 1,2,3,-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 108-67-8, Component: 1,3,5-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 67-63-0, Component: ISOPROPANOL, 10% Wt, Max Amt Code:

[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 1% Wt, Max Amt Code:

[ ] EHS, CAS: 98-82-8, Component: CUMENE, 1% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 114,145 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 146 AVU

Amount: N/A pounds

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 147 AVU

Amount: N/A pounds

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: NSTF

Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes Tolad 9022M Additive**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 7,301 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 2,281 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NTF
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

No additional chemical information is required by Texas

CHEMICAL NAME: **Lifespan 3304**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: GFU 241-2-3
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Smartguard 2820**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 42,035 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 147
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 146
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Lifespan 3331**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Self-heating
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: CRU 1344
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes - Xeric 7010 Heavy Oil Demulsifier**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 526-73-8, Component: 1,3,3-TRIMETHLYBENZENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 108-67-8, Component: 1,3,5-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 64742-95-6, Component: LIGHT AROMATIC NAPHTHA, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 1% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 38,553 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 25,432 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 147 AVU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes Foamstop 5025 LCI Antifoam**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 8008-20-6, Component: KEROSENE, 80% Wt, Max Amt Code:
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 5% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 14,124 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 8,678 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: DCU 843
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Spectrum Water Technologies - SWT 1315**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 12042-91-0, Component: ALUMINUM CHLORHYDRATE, % Wt, Max Amt Code:
[ ] EHS, CAS: 26062-79-3, Component: POLYDADMAC, % Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 415,481 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 222,854 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 235,258 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Waste Water Treating Unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-441 Silicon Trap(tm)**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 75% Wt, Max Amt Code:
[ ] EHS, CAS: 1303-86-2, Component: DIBORON TRIOXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 13% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 3% Wt, Max Amt Code:
PHYSICAL HAZARDS:
[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:
[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 30,000 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Average Daily Amount: 30,000 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241 GFU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Albemarle Action 527**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 456,044 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 176,966 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **Baker Hughes - Lifespan 3304 Hydrotreater Antifoulant**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, % Wt, Max Amt Code:
[ ] EHS, CAS: 64742-95-5, Component: HEAVY AROMATIC NAPHTHA, % Wt, Max Amt Code:
[ ] EHS, CAS: 8008-20-6, Component: KEROSENE, % Wt, Max Amt Code:
[ ] EHS, CAS: 64742-95-6, Component: LIGHT AROMATIC NAPHTHA, % Wt, Max Amt Code:
[ ] EHS, CAS: 91-20-3, Component: NAPHTHENE, % Wt, Max Amt Code:
[ ] EHS, CAS: 64742-54-7, Component: PARAFFINIC PETROLEUM DISTILLATE, % Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 1,617 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: 142 pounds Average Daily Amount code: 02 (100 - 499 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241-2-3 GFU Hydtrotreater, 7848 Amine, 100/101CWT
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Xeric 7010 HEAVY OIL DEMULSIFIER**
CAS #: UNKNOWN EHS:

[x] Identical to previous year

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 64742-95-6, Component: LIGHT AROMATIC NAPHTHA, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 526-73-8, Component: 1,2,3-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 108-67-8, Component: 1,3,5-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 98-82-8, Component: CUMENE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 5% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 83,853 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 54,271 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: 45000 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 147 AVU
Amount: 45000 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem pad
Amount: 2400 pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK -578 BRIM Hydrotreating Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1303-86-2, Component: DIBORON TRIOXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 2% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 93,600 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 93,600 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241 GFU
Amount: 93600 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Spectrum Water Technology SWT 2030**
CAS #: UNKNOWN EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 109,260 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 57,735 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 8742 WWTU - Waste Water Treating Unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Haldor Topsoe TK-447 Silicon Trap (TM)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 92% Wt, Max Amt Code:
[ ] EHS, CAS: 1303-86-2, Component: DIBORON TRIOXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 20,400 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 20,400 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 241 GFU D-101
Amount: 18000 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: DCU-843 R-9600
Amount: 2400 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Sulfuric Acid Solution Red Bird Supply**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Aspiration hazard
[ ] Germ cell mutagenicity

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 630,800 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)

Average Daily Amount: 490,315 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 31

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Plant Wide

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Hydrogen Sulfide**

CAS #: 7783-06-4 EHS:

[x] Identical to previous year

[ ] Trade Secret

[x] Pure [ ] Mixture

[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 23,224,820 pounds Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: 19,498,059 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Plant Wide (Piping)
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Vacuum Gas Oil**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 282,150,464 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 174,175,272 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 116,614,787 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK0133
Amount: 116614787 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK0082
Amount: 37800164 pounds

[ ] Confidential
Container Type: Above Ground Tank

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK0099
Amount: 39371784 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK0100
Amount: 37625576 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK 103
Amount: 50738153 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **NAPHTHA, CATALYTIC CRACKED**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 21,337,747 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 9,885,833 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature

Location: TK0077
Amount: 17863087 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes - SULFIX(tm) 9272 SCAVENGER**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 4719-04-4, Component: ALKONALAMINE/ALDEHYDE CONDENSATE, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 67-56-1, Component: METHANOL, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 141-43-5, Component: MONOETHANOLAMINE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 321,520 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 64,405 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NSTF
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes - Excalibur 7550 Additive**
CAS #: UNKNOWN EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: AMINE DERIVATIVE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: CARBOXYLIC ACID, 80% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 53,656 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 14,658 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Docks
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Sabine Road Tank Farm
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes - TOLAD (TM) 1347 Additive**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: 2-EHTYLHEXYL NITRATE, 100% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 141,986 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 71,203 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 350

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Sabine Road Tank Farm
Amount: 277773 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes - Excalibur(tm) 7760 Additive**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: AMINE DERIVATIVE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: ORGANIC ACID, 70% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 58,539 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 27,995 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Docks
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Sabine Road Tank Farm
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Suez - KLEEN AC 9502**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 77-92-9, Component: CITRIC ACID, 60% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 34,784 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 5,797 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 147 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies 586DX**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 60% Wt, Max Amt Code:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 25% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 2% Wt, Max Amt Code:
PHYSICAL HAZARDS:
[ ] Combustible Dust [ ] Corrosive to metal

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 74,836 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 74,836 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU - R-30
Amount: 74836 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Total - PC 32**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 61790-12-3, Component: TALL OIL, FATTY ACID, 100% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 104,809 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 97,212 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Sabine Road Tank Field
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Docks
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Zeolyst International Z-HD20**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: SILICA, AMORPHOUS (NON-CRYSTALLINE), 35% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-35-8, Component: TUNGSTEN OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1318-02-1, Component: ZEOLITE, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 605,223 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 605,223 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-1
Amount: 201741 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-2
Amount: 201741 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-3
Amount: 201741 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies Catalyst AT525**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 15123-80-5, Component: ALUMINUM MOLYBDENUM OXIDE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM PHOSPHATE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 2% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 27,522 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 27,522 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU - R-31
Amount: 27522 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHAMPION TECHNOLOGIES- RPA-438**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 11,208 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 8,983 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WWTU 8741
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Process Solutions (TETRA)
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHAMPION TECHNOLOGIES - RPA-444**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 15,585 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 11,631 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Location: WWTU 8741
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **AROMATIC CONCENTRATE**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 71-43-2, Component: BENZENE, 39% Wt, Max Amt Code: 13
[ ] EHS, CAS: 108-88-3, Component: TOLUENE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: C5-C9 non aromatic hydrocarbons, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 57,537,051 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 15,792,084 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 32,100,168 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Light Oil Triangle - Tk 2900
Amount: 32100168 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Location: 1747 RSU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk 925
Amount: 25436883 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Champion Technologies RPA-448**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 18,194 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 18,149 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Process Solutions TETRA

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Champion Technologies RPA-446**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 11,492 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 6,895 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Process Solutions (TETRA)
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Champion Technologies RPA-411**
CAS #: UNKNOWN EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 13,905 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 13,905 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Process Solutions (TETRA)
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WWTU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **HELIUM**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 23,871 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: 20,023 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: Plant Wide

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **HIDACID AZURE BLUE 50 PCT LIQUID DYE**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 19,061 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 10,327 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WWTU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ARGON GAS**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 21,864 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 18,439 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Plant Wide
Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CAUSTIC RED BIRD SUPPLY**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 119,499 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 100,092 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PLANT WIDE AT COOLING TOWERS
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SODIUM HYPOCHLORITE 7-15%**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 588,151 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 461,332 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PLANT WIDE AT COOLING TOWERS
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: #2 WATER TREATING PLANT
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 35 PUMP HOUSE
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **ALBEMARLE CATALYST- ACTION 536PA**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 1,400,000 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Alkylate**
CAS #: 64741-64-6 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: FULL RANGE ALKYLATION NAPHTHA, 100% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 36,005,186 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 21,800,878 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 36,005,186 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Sabine Road Tank Field --
Tank 2110
Amount: 36005186 pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 443 HFAU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Criterion InterLayer [CoMo] TL (2.5)**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 33,461 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 33,461 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: GFU 243 R-301 A
Amount: 7361 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 242 GFU D-101
Amount: 18739 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU R-301 B
Amount: 7361 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Criterion Sentry Support [Inert] 1000kg**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 152,480 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 152,480 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: HCU 943 R-2
Amount: 57642 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: HCU 943 R-1
Amount: 57642 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: HCU 943 R-3
Amount: 37196 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Dimethyl disulfide (DMDS)**
CAS #: 624-92-0 EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 150,045 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 133,376 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: All Locations of Plant
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes - Xeric 7020 Heavy Oil Demulsifier**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 526-73-8, Component: 1,2,3-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 108-67-8, Component: 1,3,5-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 98-82-8, Component: CUMENE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 67-63-0, Component: ISOPROPANOL, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 64742-95-6, Component: LIGHT AROMATIC NAPHTHA, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 69,879 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 54,202 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)

Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: NF, STF, 41, 47 Pump House, PS 162, 163
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 147 AVU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SUEZ Flogard MS 6210**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 13598-37-3, Component: ZINC BIS(DIHYDROGEN PHOSPHATE), 20% Wt, Max Amt Code:
[ ] EHS, CAS: 7733-02-0, Component: ZINC SULFATE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 7664-38-2, Component: PHOSPHORIC ACID, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 14,657 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 11,890 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tank Wagon
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 244 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 246 DHT
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 443 HFAU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 942 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRI
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Location: 136 A/B COOLING TOWERS
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241 - 2- 3 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 243 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 245 GHU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SUEZ GENGARD GN 8203**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 202420-04-0, Component: CHLOROTOLYLTRIAZOLE SODIUM SALT, 3% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Skin corrosion or irritation
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 40,563 pounds
Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 26,510 pounds
Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 2,600 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 243 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Tank Wagon
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 70 AIR COMPRESSOR HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Tank Wagon
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 8742 WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 245 GHU
Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Suez Spectrus NX1100**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 7786-30-3, Component: MAGNESIUM CHLORIDE, 3% Wt, Max Amt Code:

[ ] EHS, CAS: 52-51-7, Component: 2-BROMO-2-NITROPROPANE-1,3-DIOL, 10% Wt, Max Amt Code:

[ ] EHS, CAS: 10377-60-3, Component: MAGNESIUM NITRATE, 10% Wt, Max Amt Code:

[ ] EHS, CAS: 55965-84-9, Component: MIXTURE OF: 5-CHLORO-2-METHYL-4-ISOTHIANZOLIN-3-ONE AND 2-METHYL-4-ISOTHIAZOLIN-3-ONE, 10% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 6,710 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)

Average Daily Amount: 3,950 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 146 AVU

Amount: N/A pounds

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 244 GFU

Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 246 DHT
Amount: N/A pounds

[ ] Confidential
Container Type: Tank Wagon
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 233 CWT
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SUEZ GENGUARD 8020**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 110-16-7, Component: MALEIC ACID, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 20,751 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 13,858 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 146
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 136 A/B Cooling Towers
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241, 2, 3 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 244 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Location: 246 DHT
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 543 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 544 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 942 HCU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **FERRIC CHLORIDE**
CAS #: 7705-08-0 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 435,720 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 6,100 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 500 pounds
No. days on-site: 365

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 8742 WWTU
Amount: 500 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes Tolad 3005R Fuel Additive**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 64742-94-5, Component: HEAVY AROMATIC NAPHTHA, 60% Wt, Max Amt Code:
[ ] EHS, CAS: 91-20-3, Component: NAPHTHENE, 5% Wt, Max Amt Code:
[x] EHS, CAS: 108-05-4, Component: VINYL ACETATE, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 40,334 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 17,247 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Slab
Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: SRTF
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Cat Trap 10,20,30,40,50,65,80**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 6,540 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 6,540 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 6,540 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU R-1000
Amount: 6540 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **EC9078A Antifoam**
CAS #: UNKNOWN EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 20,000 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 16,000 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 3,200 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: DCU 843
Amount: 5800 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: 16000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Smartguard 2810**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 29,273 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 146
Amount: 2600 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 147
Amount: 2600 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Chem Pad
Amount: 18200 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Suez Cortrol OS5700**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 97173-34-7, Component: HYDROXYPROPYL HYDROXYLAMINE, 40% Wt, Max Amt Code:
[ ] EHS, CAS: 3710-84-7, Component: N,N DIETHYLHYDROXYLAMINE, 10% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 2,500 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 543 SRU, Scot 1, 8746 S?WS, 354 CT
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 546 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 Boiler House
Amount: N/A pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CRUDE OIL**

CAS #: 8002-05-9 EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 515,730,844 pounds Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: 319,332,532 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: 113,420,448 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: TK 285

Amount: 111237899 pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: TK 106

Amount: 57528522 pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: TK 107

Amount: 55604298 pounds

[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK 110
Amount: 87644219 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK 111
Amount: 88652040 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK 283
Amount: 1643417 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK 284
Amount: 113420448 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **DIESEL FUEL**
CAS #: 68476-30-2 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 422,945,205 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 191,640,759 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Maximum amount in largest container: 96,444,828 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-2162
Amount: 44828570 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-2163
Amount: 46172387 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-2164
Amount: 47022838 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-2182
Amount: 43617718 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-2183
Amount: 43629054 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-
2186
Amount: 95960727 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK - 005
Amount: 32141343 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-1849
Amount: 31625011 pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NAPHTHA, PETROLEUM**

CAS #: 8030-30-6 EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 57,738,455 pounds Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: 29,428,488 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: 20,118,407 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: SABINE ROAD TANK FARM

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: 443 ALKYLATION UNIT

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 1344 CRU

Amount: N/A pounds

[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 7945 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-2101
Amount: 17748708 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK-896
Amount: 20118407 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-926
Amount: 19871341 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **BUTANES**
CAS #: 106-97-8 EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 7,174,360 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: 3,964,495 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: 7,174,360 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: TK2154
Amount: 7174360 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Inhibitor AZ8104**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 21,000 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 6,500 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 2,600 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: South Storage Pad
Amount: 21000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **RECOVERD HYDROCARBONS**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 35,235,395 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 15,776,056 pounds Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 25,985,986 pounds
No. days on-site: 365

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK0151
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK2145
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK1790
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: TK1791
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **SPENT CAUSTIC**

CAS #: 64742-40-1 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Maximum Amount: 763,575 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 763,548 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: 763,575 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tk-2401
Amount: 763575 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CALCIUM HYDROXIDE LIME**
CAS #: 1305-62-0 EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 48,100 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 48,100 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Bag
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 443 ALKYLATION UNIT
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

No additional chemical information is required by Texas

CHEMICAL NAME: **SULFUR (Molten)**
CAS #: 7783-06-4 EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[x] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 16,867,979 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 8,957,249 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Below Ground Tank
Pressure: Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 545 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Below Ground Tank
Pressure: Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 541-4 SRU's
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHEVRON TURBINE GST OILS**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 30,103 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 14,080 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 146 AVU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Location: 18 BOILER HOUSE
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 241,2,3,5 GFU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 541-4 SRU'S
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 8742 WWTU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 244 GFU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 545 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 843 DCU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 942 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Garage
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **PROPYLENE - PROPANE MIX**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 509,992 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 76,960 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: 225,720 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: SABINE ROAD TAND FARM
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 443 ALKYLATION UNIT
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Location: 7945 SGRU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: TK 2165
Amount: 225720 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: Tk 2166
Amount: 69779 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: TK 2167
Amount: 214492 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **HYDROFLUORIC ACID**
CAS #: 7664-39-3 EHS: YES

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 550,000 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 500,000 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: 500,000 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 443 ALKYLATION UNIT
Amount: 550000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Axens HR 841 Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 25% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 60,185 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 60,185 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 245 GFU - R-3100
Amount: 60185 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CRITERION MaxTrap [NiV] VGO CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 75% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 19% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-56-3, Component: PHOSPHORUS PENTOXIDE, 3% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 136,900 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 136,900 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-1
Amount: 136900 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICAL NAME: **Advanced Refining Technologies ICR 185NN4 Catalyst**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM TRIOXIDE, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: PLYCARBOXYLIC ACID, NICKEL SALT, 2% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: POLYCARBOXYLIC ACID, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1335-30-4, Component: SYNTHETIC, AMORPHOUR ALUMINIUM SILICATE, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 2% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 212,400 pounds
Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 212,400 pounds
Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure
Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1001
Amount: 212400 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ALBEMARLE(R) KF-851 CATALYST**
CAS #: UNKNOWN EHS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM ORTHOPHOSPHATE, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 60% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL(II) OXIDE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 52,650 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 52,650 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M-201
Amount: 38095 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GUF - M-101
Amount: 14555 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 193**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 03/22/2023, REASON: Catalyst was removed and replaced with ICR 180NM4 during unit outage.

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1335-30-4, Component: SYNTHETIC, AMORPHOUS ALUMINIUM SILICATE, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-35-8, Component: TUNGSTEN TRIOXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1318-02-1, Component: ZEOLITES, 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 294,966 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 294,966 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 80

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1001
Amount: 294966 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ALBERMARLE KF-861 CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

MIXTURE COMPONENTS:

[ ] EHS, CAS: 7784-30-7, Component: ALUMINUM ORTHOPHOSPHATE, 15% Wt, Max Amt Code:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 35% Wt, Max Amt Code:

[ ] EHS, CAS: 1303-86-2, Component: BORON OXIDE, 3% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOOXIDE, 5% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 50,187 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)

Average Daily Amount: 50,187 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 246 DHT - R-3000

Amount: 50187 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **ALBERMARLE(R) KF-648 CATALYST**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 10% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 85% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 34,771 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 34,771 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M-101
Amount: 17605 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 244 GFU - M201
Amount: 17166 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Criterion InterLayer [NiMo} TL**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Aspiration hazard
[ ] Germ cell mutagenicity

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 7,627 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)

Average Daily Amount: 7,627 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 943 HCU R-3

Amount: 7627 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Criterion OptiTrap MacroRing HC**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 80% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) TRIOXIDE, 10% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 24,010 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: 24,010 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301A
Amount: 4034 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 243 GFU - R-301 B
Amount: 4034 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-2
Amount: 3751 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU R-1
Amount: 8440 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-3
Amount: 3751 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Denstone 2000**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 13463-67-7, Component: TITANIUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1309-37-1, Component: IRON OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 12136-45-7, Component: POTASSIUM OXIDE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 14808-60-7, Component: QUARTZ, 15% Wt, Max Amt Code:
[ ] EHS, CAS: 60676-86-0, Component: SILICA, FUSED, 55% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] EHS, CAS: 1313-59-3, Component: SODIUM OXIDE, 1% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 163,773 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 163,773 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1000
Amount: 70887 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU - R-1001
Amount: 71317 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 942 HCU R-2000
Amount: 21672 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Suez Solus AP25**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, [LIQUID], 10% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 6,732 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: 4,281 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1344 CRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tank Wagon
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 15 Boiler House
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 18 Boiler House
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 543 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 545 SRU
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 546 SRU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies ICR 250 Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 12004-35-2, Component: DIALUMINUM NICKEL TETRAOXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: POLYCARBOXYLIC ACID, NICKEL SALT, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1335-30-4, Component: SYNTHETIC, AMORPHOUS ALUMINIUM SILICATE, 25% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-35-8, Component: TUNGSTEN TRIOXIDE, 50% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 127,260 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 127,260 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 942 HCU -R-2000

Amount: 127260 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Zeolyst International Z-MD20 Catalyst**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 40% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:

[ ] EHS, CAS: 7631-86-9, Component: SILICA, AMORPHOUS, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 1314-35-8, Component: TUNGSTEN OXIDE, 20% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 702,666 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)

Average Daily Amount: 702,666 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 943 HCU - R-1

Amount: 234222 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-2
Amount: 234222 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-3
Amount: 234222 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Advanced Refining Technologies AT714G Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 15123-80-5, Component: ALUMINUM MOLYBDENUM OXIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 90% Wt, Max Amt Code:
[ ] EHS, CAS: 14177-55-0, Component: MOLYBDENUM NICKEL OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 12004-35-2, Component: NICKEL ALUMINATE, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 57,797 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 57,797 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 1344 CRU - R-31
Amount: 57797 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Shell - SENTRY(R) OptiTrap[FilterLobe] CATALYST**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 80% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM OXIDE, 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 17,650 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 17,650 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: 943 HCU - R-1
Amount: 17650 pounds

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Chevron Regal R&O 22, 32, 46, 68 , 100, 115, 150, 220, 320, 460, 680**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: HIGHLY REFINED MINERAL OIL (C15-C50), 99% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 19,304 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 8,527 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Plant Wide
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **UOP - CLR-304 5x8 ADSORBENT**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 10% Wt, Max Amt Code:

[ ] EHS, CAS: 7631-86-9, Component: SILICON OXIDE (SIO2), 5% Wt, Max Amt Code:

[ ] EHS, CAS: 497-19-8, Component: SODIUM CARBONATE, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 1314-13-2, Component: ZINC OXIDE, 45% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 83,392 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)

Average Daily Amount: 82,392 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: 1344 CRU - T-35B

Amount: 82392 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Dow Amberlite HPR1200 H Ion Exchange**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 69011-20-7, Component: SULFONATED POLYMER OF STYRENE, ETHYLSTYRENE AND DIVNYLBENZENE IN THE HYDROGEN FORM, 50% Wt, Max Amt Code:

[ ] EHS, CAS: 7732-18-5, Component: WATER, 50% Wt, Max Amt Code:

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

PHYSICAL HAZARDS:

[x] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 26,215 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 26,215 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: #2 WTP
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Redbird RED HOT**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 1% Wt, Max Amt Code:
[ ] EHS, CAS: 111-76-2, Component: GLYCOL ETHER EB, 4% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Aspiration hazard

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 6,400 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)

Average Daily Amount: 4,456 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 1242 SGRU

Amount: N/A pounds

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: 146 AVU

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes BPR 81232 Corrosion Inhibitor**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[x] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 8008-20-6, Component: KEROSENE, 60% Wt, Max Amt Code:

[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 1% Wt, Max Amt Code:

[ ] EHS, CAS: , Component: FATTY ACID AMINE REACTION PRODUCT, 30% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 55,759 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 5,123 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 1,800 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 146
Amount: 1800 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: AVU 147
Amount: 1800 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Albemarle FCC Catalyst**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1332-58-7, Component: KAOLIN, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1309-48-4, Component: MAGNESIUM OXIDE, [SLURRY], 15% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: SILICON DIOXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 1318-02-1, Component: ZEOLITES, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 1,784,000 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: 1,302,000 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1241 FCCU
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Baker Hughes Lifespan 3331 Hydrotreater Antioxidant**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[x] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:
[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:
[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 11,134 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 6,582 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature

Facility Name: THE PREMCOR REFINING GROUP INC. DBA VALERO PORT ARTHUR REFIN

Location: NTF, STF, 41, 47 pump house, PS 162, 163
Amount: 2500 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:
[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 62671
TCEQ Regulated Entity Number (RN): RN102584026
TCEQ Customer Number (CN): CN601420748
Facility was Purchased or First Time Reporting Hazardous Substances: NO
Effective Date: N/A
Facility was Sold, Closed or No Longer Stores Hazardous Substances: NO
Inactive Date: N/A

STATE / LOCAL FEES: $500

[x] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

Map of Latitude and Longitude of Admin Bldg 2012.bmp
Refinery Map.pdf

Certification (Read and sign after completing all sections)
I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 185
and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Jacob Stanton, Safety Engineer		02/28/2024
Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date Signed

Facility Name: AIR PRODUCTS PORT ARTHUR

FACILITY IDENTIFICATION:

AIR PRODUCTS PORT ARTHUR
Dept: N/A
Physical Address: 1801 S GULFWAY DR, GATE 37, PORT ARTHUR, TX 77640-4416
Mailing Address: PO BOX 757, PORT ARTHUR, TX 77641-0757
Geographic Location:
County: JEFFERSON
Latitude: 29.865858
Longitude: -93.964931
Fire Department: Port Arthur Fire Department
LEPC: Jefferson LEPC

[x] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: 878893775
NAICS: 325120 (Industrial Gas Manufacturing)

RMP: 100000196218 (RMP Facility ID)
TRI: 77640RPRDS1801S (TRI Facility ID)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 35

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [x] Yes [ ] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [x] Yes [ ] No

CONTACT INFORMATION:

David Reynolds
Organization: AIR PRODUCTS LLC
Title: ENGINEER
Contact Type(s): OWNER / OPERATOR, TIER II INFORMATION CONTACT
Address: 1801 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Work Phone: 409-983-8908
Email: REYNOLDDP@AIRPRODUCTS.COM

Andrew Johnson
Organization: AIR PRODUCTS LLC
Title: PLANT MANAGER
Contact Type(s): EMERGENCY CONTACT, FAC. EMERGENCY COORDINATOR, OWNER / OPERATOR, TIER II INFORMATION CONTACT
Address: 1801 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: 24-Hour: 281-478-7562 Cell Phone: 409-201-8750 Emergency: 409-983-8921 Work Phone: 409-983-8901
Email: johnsoaw@AIRPRODUCTS.COM

Gail Richardson
Organization: AIR PRODUCTS LLC
Title: SENIOR PRINCIPAL ENVIRONMENTAL ENGINEER
Contact Type(s): BILLING CONTACT, SUBMITTER, TIER II INFORMATION CONTACT
Address: 430 MILLER CUT OFF RD, LA PORTE, TX, 77571
Phones: Work Phone: 409-782-0014
Email: RICHARG4@AIRPRODUCTS.COM

Facility Name: AIR PRODUCTS PORT ARTHUR

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **Katalco 32-5**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: 188,610 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: PA1 Unit SMR

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Lube Oil**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[x] Pure [ ] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit CO2 Blower
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit CO2 Capture Rinse Compressor
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Blower
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: CO2 Capture Unit Product Compressor
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit Compressors

Facility Name: AIR PRODUCTS PORT ARTHUR

Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit Compressors
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit Gas Turbine
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit Gas Turbine
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit HRSG
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit Steam Turbine
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: CO2 CoGen Gas Turbine
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Unit Maintenance Shed New Oil Tank
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Unit Maintenance Shed
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature

Location: PA2 Stores Building (South End)
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Capture Rinse Compressor
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 Unit Oil Storage Conex
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Unit Oil Storage Conex
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Unit Maintenance Shed Used Oil Tote
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Molecular Sieve 5A**
CAS #: 69912-79-4 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Aspiration hazard

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit PSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit PSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit CO2 Capture VSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Capture VSAs
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Hydrogen/Syngas Mixture**
CAS #: 1333-74-0 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Self-heating [ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Silica Gel**
CAS #: 63231-67-4 EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit Instrument Air Driers
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit Instrument Air Driers
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit CO2 Instrument Air Driers
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Instrument Air Driers
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Transformer Oil**
CAS #: 64742-53-6 EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Transformers Located Throughout the facility
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 57-4G**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: AIR PRODUCTS PORT ARTHUR

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 71-5**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

Facility Name: AIR PRODUCTS PORT ARTHUR

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 32-4G**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CARBON DIOXIDE, [REFRIGERATED LIQUID]**
CAS #: 124-38-9 EHS: NO

[x] Identical to previous year

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: PA1 Unit Gas Turbine Generator
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: PA2 Unit Gas Turbine Generator
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NITROGEN (LIQUEFIED)**
CAS #: 7727-37-9 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: PA1 Unit Liquid Nitrogen (LIN) Storage Tank
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 61-1**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Facility Name: AIR PRODUCTS PORT ARTHUR

Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **MONOETHANOLAMINE**
CAS #: 141-43-5 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 unit water treatment area
Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 unit water treatment area
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 Unit Water Treatment Area Storage
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: CO2 CoGen Unit HRSG
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Bleach Solution**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7681-52-9, Component: Sodium hypochlorite, 13% Wt, Max Amt Code:
[ ] EHS, CAS: 7647-14-5, Component: SODIUM CHLORIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 7732-18-5, Component: Water, 78% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds

Facility Name: AIR PRODUCTS PORT ARTHUR

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Unit Cooling Tower
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 Unit Cooling Tower
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: CO2 Capture Unit Cooling Tower
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Optisperse HP54707**

CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[x] EHS, CAS: 50-00-0, Component: FORMALDEHYDE, % Wt, Max Amt Code:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, % Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Unit Water Treatment Area
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 Unit Water Treatment Area
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 Unit Water Treatment Area Tote
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Gengard GN8113**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Cooling Tower
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 Cooling Tower
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: CO2 Capture Unit Cooling Tower
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **TRIETHYLENE GLYCOL**
CAS #: 112-27-6 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: CO2 Capture Unit TEG System
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 CO2 Capture Unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CARBON DIOXIDE**
CAS #: 124-38-9 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: PA1 Unit CO2 Capture VSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Capture VSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: CO2 Capture Unit
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit CO2 Capture Surge Drums
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Capture Surge Drums
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions
Location: CO2 CoGen Gas Turbine Generator
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **NATURAL GAS**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Aspiration hazard

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: PA1 Unit SMR

Amount: N/A pounds

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: PA2 Unit SMR

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 33-1**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1314-13-2, Component: ZINC OXIDE, 90% Wt, Max Amt Code:

[ ] EHS, CAS: , Component: NICKEL MONOXIDE, 3% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 71-6**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7782-42-5, Component: GRAPHITE (NATURAL), 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1333-82-0, Component: CHROMIUM OXIDE, 10% Wt, Max Amt Code:
[ ] EHS, CAS: null, Component: DIIRON TRIOXIDE, 83% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: AIR PRODUCTS PORT ARTHUR

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SULFURIC ACID**
CAS #: 7664-93-9 EHS: YES

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Universal Power Supply (UPS) Battery Banks
Amount: N/A pounds

Facility Name: AIR PRODUCTS PORT ARTHUR

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Activated Alumina**

CAS #: 1344-28-1 EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 11 (500,000 - 999,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 11 (500,000 - 999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: PA1 Unit PSAs

Amount: N/A pounds

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: PA2 Unit PSAs

Amount: N/A pounds

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: PA1 Unit CO2 Capture VSAs

Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Capture VSAs
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Activated Carbon**
CAS #: 64365-11-3 EHS:

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Hydrogen Pipeline Oil Removal Carbon Bed Absorbent
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit PSA Beds
Amount: N/A pounds

[ ] Confidential

Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit PSA Beds
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: CO2 Capture Unit TEG Carbon Filter
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 CO2 Capture Unit Rinse Compressor Oil Removal Carbon Beds
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 CO2 Capture Unit Rinse Compressor Oil Removal Carbon Beds
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Alumina Ceramic Balls (Inert)**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 11 (500,000 - 999,999 pounds)

Facility Name: AIR PRODUCTS PORT ARTHUR

Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit CO2 Capture VSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit PSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit PSAs
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit CO2 Capture VSAs
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Ammonia (Aqueous)**
CAS #: 1336-21-6 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:
[ ] Combustible Dust [ ] Corrosive to metal

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA1 Unit Ammonia Storage Tank
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: PA2 Unit Ammonia Storage Tank
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **DENOX (DNX) Catalyst**

CAS #: 1314-62-1 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Aspiration hazard

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit SMR Selective Catalytic Reduction (SCR) Unit
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit SMR Selective Catalytic Reduction (SCR) Unit
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit HRSG Selective Catalytic Reduction (SCR) Unit
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: CO2 CoGen Unit HRSG Selective Catalytic Reduction (SCR) Unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **ETHYLENE GLYCOL**
CAS #: 107-21-1 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)

Facility Name: AIR PRODUCTS PORT ARTHUR

[ ] Self-heating
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit Gas Turbine
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA1 Unit Compressors
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PA2 Unit Compresors
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CRG-LHCR**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: AIR PRODUCTS PORT ARTHUR

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 20,792 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: V103 Prereformer
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:

[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 69111
TCEQ Regulated Entity Number (RN): RN101941284
TCEQ Customer Number (CN): CN602299257
Facility was Purchased or First Time Reporting Hazardous Substances: NO
Effective Date: N/A
Facility was Sold, Closed or No Longer Stores Hazardous Substances: NO
Inactive Date: N/A

STATE / LOCAL FEES: $200

[x] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

Port_Arthur_19991015_PA1_Plot_Plan.pdf
Port_Arthur_20070328_PA2_Plot_Plan.pdf

Certification (Read and sign after completing all sections)
I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 31
and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Gail Richardson, Sr. Environmental Specialist — 02/27/2024
Name and official title of owner/operator
OR owner/operator's authorized representative — Signature — Date Signed

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

FACILITY IDENTIFICATION:

CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY
Dept: N/A
Physical Address: 2001 S GULFWAY DR, PORT ARTHUR, TX 77640-4534
Mailing Address: PO BOX 1547, PORT ARTHUR, TX 77641-1547
Geographic Location: WEST OF PORT ARTHUR TEXAS ON STATE HWY 87 TOWARD SABINE PASS
County: JEFFERSON
Latitude: 29.851798
Longitude: -93.976749
Fire Department: Port Arthur Fire Dept
LEPC: Jefferson LEPC

[ ] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: 152975665
NAICS: 325110 (Petrochemical Manufacturing)

RMP: 100000092142 (RMP Facility ID)
TRI: 77640CHVRN2001S (TRI Facility ID)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 500

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [x] Yes [ ] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [x] Yes [ ] No

CONTACT INFORMATION:

Kevin Mercy
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: ENVIRONMENTAL SUPERINTENDENT
Contact Type(s): TIER II INFORMATION CONTACT
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 409-433-2755 Work Phone: 409-985-0726
Email: MERCYK@CPCHEM.COM

LISA WHITMAN
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: EHS&S ADMINISTRATIVE ASSISTANT
Contact Type(s): BILLING CONTACT
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 409-474-1427 Work Phone: 409-882-6067
Email: WHITMLM@CPCHEM.COM

CHAD FERRIS
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: SAFETY SUPERVISOR
Contact Type(s): TIER II INFORMATION CONTACT
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 713-865-6574
Email: FERRICW@CPCHEM.COM

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

JASJIT SARANG
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: HAZARD COMMUNICATION SPECIALIST
Contact Type(s): TIER II INFORMATION CONTACT
Address: 10001 SIX PINES DR, THE WOODLANDS, TX, 77380
Phones: Cell Phone: 832-948-6832 Work Phone: 832-813-4425
Email: SARANJK@CPCHEM.COM

JEREMY STAFFORD
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: HEALTH AND SAFETY SUPERINTENDENT
Contact Type(s): TIER II INFORMATION CONTACT
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 832-658-9375 Work Phone: 409-882-6336
Email: STAFJE@CPCHEM.COM

MARK FLOWERS
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: EMERGENCY PREPAREDNESS AND SECURITY SUPERVISOR
Contact Type(s): SUBMITTER
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 409-300-1552 Work Phone: 409-985-0782
Email: FLOWEM@CPCHEM.COM

MARK FLOWERS
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY
Title: EMERGENCY PREPAREDNESS AND SECURITY SUPERVISOR
Contact Type(s): FAC. EMERGENCY COORDINATOR
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 409-300-1552 Work Phone: 409-985-0782
Email: FLOWEM@CPCHEM.COM

SECURITY FACILITY
Title: SECURITY
Contact Type(s): EMERGENCY CONTACT
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: 24-Hour: 409-985-0700 Emergency: 409-985-0863
Email: NELRIC@CPCHEM.COM

CONNIE WEBER
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: EHS&S MANAGER
Contact Type(s): SAFETY MANAGER
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 409-300-2756 Work Phone: 409-882-6334
Email: WEBERC@CPCHEM.COM

DAVID PARSLEY
Organization: CHEVRON PHILLIPS CHEMICAL COMPANY LP
Title: PLANT MANAGER
Contact Type(s): OWNER / OPERATOR
Address: 2001 S GULFWAY DR, PORT ARTHUR, TX, 77640
Phones: Cell Phone: 979-417-1925 Work Phone: 409-985-0731

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Email: PARSLDG@CPCHEM.COM

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **Heavy Aromatic Distillate (HAD)**

CAS #: 64742-47-8 EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 90-12-0, Component: 1-METHYLNAPHTHALENE, 1% Wt, Max Amt Code: 02

[ ] EHS, CAS: 496-11-7, Component: 2,3-DIHYDRO-1H-INDENE, 25% Wt, Max Amt Code: 06

[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 1% Wt, Max Amt Code: 02

[ ] EHS, CAS: 91-57-6, Component: 2-METHYLNAPHTHALENE, 1% Wt, Max Amt Code: 02

[ ] EHS, CAS: 2825-82-3, Component: 4,7-METHANO-1H-INDENE, OCTAHYDRO-, (3AR,4S,7R,7AS)-REL-, 25% Wt, Max Amt Code: 06

[ ] EHS, CAS: 98-82-8, Component: CUMENE, 5% Wt, Max Amt Code: 04

[ ] EHS, CAS: 1330-20-7, Component: DIMETHYLBENZENE, 6% Wt, Max Amt Code: 04

[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 25% Wt, Max Amt Code: 06

[ ] EHS, CAS: 25550-14-5, Component: ETHYLTOLUENE, 5% Wt, Max Amt Code: 04

[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 1% Wt, Max Amt Code: 02

[ ] EHS, CAS: 108-88-3, Component: TOLUENE, 5% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 46,037 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)

Maximum amount in largest container: 46,037 pounds

No. days on-site: 185

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Ethylene Unit 1544 - ISO Tank at Oil Injection to Compressor GB-201 4th Stage

Amount: 46037 pounds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **MOLSIV ADSORBENT EPG-2 1/8**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: , Component: MINERAL BINDER, 21% Wt, Max Amt Code: 06

[ ] EHS, CAS: 14808-60-7, Component: QUARTZ (SIO2), 4% Wt, Max Amt Code: 04

[ ] EHS, CAS: 1318-02-1, Component: ZEOLITE, CUBOIDAL, CRYSTALLINE, SYNTHETIC, NON-FIBROUS, 75% Wt, Max Amt Code: 07

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 58,632 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)

Average Daily Amount: 11,370 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: 2,100 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Bag

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Warehouse 2

Amount: 58632 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **LEAD ACID BATTERY**

CAS #: null EHS: NO

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7440-36-0, Component: ANTIMONY, 1% Wt, Max Amt Code: 03
[ ] EHS, CAS: 7439-92-1, Component: LEAD, 62% Wt, Max Amt Code: 07
[x] EHS, CAS: 7664-93-9, Component: SULFURIC ACID, 31% Wt, Max Amt Code: 06
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 77,842 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 77,842 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: 50 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Boiler Unit 1041 - ECC-1
Amount: 730 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Boiler Unit 1041 - RIE-B1
Amount: 12960 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - IA-907
Amount: 384 pounds

[ ] Confidential
Container Type: Battery

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Central Control Room - CCRGEN1
Amount: 2520 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: MCC B-SS220
Amount: 730 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Power Station 6 B-PS6
Amount: 2520 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cyclohexane Unit 1741 - 1748 THDU MCC
Amount: 11700 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 505 - Diesel Fire Water Pumps J1 and J2
Amount: 200 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 137 - SS-137
Amount: 730 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Internal Combustion Vehicles and Equipment
Amount: 3600 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: CFP Unit 1746 - Ineos MCC Building
Amount: 584 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Central Control Room
Amount: 12960 pounds

[ ] Confidential

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cyclohexane Unit 1741 - RIE
Amount: 12960 pounds

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit IA-901 RIE Building
Amount: 15264 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Nalco EC3368A Antifoulant**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Used
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

No additional chemical information is required by Texas

CHEMICAL NAME: **NALCO EC3214A Process Antifoulant**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 71-41-0, Component: AMYL ALCOHOL, 10% Wt, Max Amt Code: 04
[ ] EHS, CAS: 64742-94-5, Component: HEAVY AROMATIC NAPHTHA, 60% Wt, Max Amt Code: 05
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 5% Wt, Max Amt Code: 03
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 1% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: ALIPHATIC ALCOHOL, 5% Wt, Max Amt Code: 03
[ ] EHS, CAS: , Component: SUBSTITUTED ALKYLAMINE, 5% Wt, Max Amt Code: 03
[ ] EHS, CAS: , Component: ALKYL-N-HETEROCYCLE, 5% Wt, Max Amt Code: 03
[ ] EHS, CAS: 123-51-3, Component: ISOAMYL ALCOHOL, 5% Wt, Max Amt Code: 03

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 14,680 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 7,340 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. N78921 by FA-406 Depropanizer Reflux Drum and FA-407 Debutanizer Reflux Drum
Amount: 7340 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - TK-1115 by DA-402 Primary Deethanizer System

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Amount: 7340 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Nalco EC5626A Fuel Corrosion Inhibitor**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: ALIPHATIC DIBASIC ACID, 30% Wt, Max Amt Code: 03
[ ] EHS, CAS: , Component: 1,2,4-TRIMETHYLBENZENE, 1% Wt, Max Amt Code: 01
[ ] EHS, CAS: , Component: HEAVY AROMATIC NAPHTHA, 30% Wt, Max Amt Code: 03
[ ] EHS, CAS: , Component: NAPHTHALENE, 5% Wt, Max Amt Code: 02
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 3,080 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 3,080 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 508 - Tank No. 81726
Amount: 3080 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **3D Trasar 3DT184**
CAS #: UNKNOWN EHS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

INACTIVE DATE: 01/01/2021, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7664-38-2, Component: PHOSPHORIC ACID, 60% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 137
Amount: N/A pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 294
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **COMPTRENE EC3074A**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: 64742-94-5, Component: HEAVY AROMATIC NAPHTHA, 60% Wt, Max Amt Code: 06
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 10% Wt, Max Amt Code: 04
[ ] EHS, CAS: 64742-65-0, Component: PARAFFINIC OIL, 25% Wt, Max Amt Code: 05

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 25,945 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 24,527 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. C39799 by GB-201 Cracked Gas Compressor System
Amount: 24527 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Laydown Yard - North of Laboratory
Amount: 1418 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **NALCO EC3054A Process Antifoulant**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 25% Wt, Max Amt Code:
[ ] EHS, CAS: 128-37-0, Component: 2,6-DI-TERT-BUTYL-4-METHYLPHENOL, 25% Wt, Max Amt Code:
[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 50% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1544 Ethylene Unit - Throughout the unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **AC 40**
CAS #: 7440-44-0 EHS: NO
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[x] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Self-heating [ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: In Process Only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NALCO 71D Plus**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 111-87-5, Component: 1-OCTANOL, 5% Wt, Max Amt Code: 01
[ ] EHS, CAS: , Component: ALIPHATIC ALCOHOL, 5% Wt, Max Amt Code: 01
[ ] EHS, CAS: , Component: FATTY ALKYL POLYGLYCOL, 5% Wt, Max Amt Code: 01
[ ] EHS, CAS: 64742-47-8, Component: PETROLEUM DISTILLATES, HYDROTREATED LIGHT , 10% Wt, Max Amt Code: 01
[ ] EHS, CAS: 25322-69-4, Component: POLYPROPYLENE GLYCOL, 10% Wt, Max Amt Code: 01
[ ] EHS, CAS: 57-11-4, Component: STEARIC ACID, 5% Wt, Max Amt Code: 01
[ ] EHS, CAS: 64741-44-2, Component: STRAIGHT RUN MIDDLE DISTILLATE, 60% Wt, Max Amt Code: 02

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure) [ ] Aspiration hazard

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 245 pounds Maximum Amount code: 02 (100 - 499 pounds)

Average Daily Amount: N/A Average Daily Amount code: 02 (100 - 499 pounds)

Maximum amount in largest container: 35 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Plastic Bottles Or Jugs

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Laydown Yard - North of Laboratory

Amount: 245 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **1,1,1,2-TETRAFLUOROETHANE**

CAS #: 811-97-2 EHS: NO

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[x] Pure [ ] Mixture

[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)

Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

STORAGE LOCATIONS
[ ] Confidential
Container Type: Can
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Maintenance Shops, Storehouse
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **MOLSIV ADSORBENT 3A EPG 1/16**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: MINERAL BINDER, 20% Wt, Max Amt Code: 05
[ ] EHS, CAS: 14808-60-7, Component: QUARTZ (SIO2), 4% Wt, Max Amt Code: 04
[ ] EHS, CAS: 7732-18-5, Component: WATER, 1% Wt, Max Amt Code: 02
[ ] EHS, CAS: 1318-02-1, Component: ZEOLITE, CUBOIDAL, CRYSTALLINE, SYNTHETIC, NON-FIBROUS, 75% Wt, Max Amt Code: 07

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 48,232 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 7,930 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 2,100 pounds
No. days on-site: 365

STORAGE LOCATIONS
[x] Confidential
Container Type: Bag
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Warehouse 2
Amount: 48232 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Fortis 3071A**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 128-37-0, Component: 2,6-DI-TERT-BUTYL-4-METHYLPHENOL, 20% Wt, Max Amt Code: 04
[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 20% Wt, Max Amt Code: 04
[ ] EHS, CAS: 78-83-1, Component: ISOBUTANOL, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: 1330-20-7, Component: XYLENE, 55% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 5,920 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 5,920 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. N80118 by DA-405 Debutanizer
Amount: 5920 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Sulfric Acid**
CAS #: 7664-93-9 EHS:
INACTIVE DATE: 12/31/2022, REASON: Duplicate and misspelled entry in Chemical Name. Consolidating to one entry for

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Sulfuric acid.

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[x] EHS, CAS: 7664-93-9, Component: SULFURIC ACID, % Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[x] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 02 (100 - 499 pounds)
Average Daily Amount: N/A Average Daily Amount code: 02 (100 - 499 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Misspelled Chemical Name
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **3DT098 Corrosion Inhibitor**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: CHLOROTOLYLTRIAZOLE SODIUM SALT, 20% Wt, Max Amt Code:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, [LIQUID], 5% Wt, Max Amt Code:

[ ] EHS, CAS: , Component: SODIUM TOLYLTRIAZOLE, 5% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)

Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 180

STORAGE LOCATIONS

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Cooling Tower 137/294

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Refinery Fuel Gas**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)

Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: Ethylene Unit 1544 - Process Only

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Molsiv 3A-EPG**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: , Component: MINERAL BINDER, 20% Wt, Max Amt Code: 06

[ ] EHS, CAS: 14808-60-7, Component: QUARTZ (SIO2), 4% Wt, Max Amt Code: 04

[ ] EHS, CAS: 7732-18-5, Component: WATER, 1% Wt, Max Amt Code: 03

[ ] EHS, CAS: 1318-02-1, Component: ZEOLITE, CUBOIDAL, CRYSTALLINE, SYNTHETIC, NON-FIBROUS, 75% Wt, Max Amt Code: 08

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Maximum Amount: 66,934 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 37,634 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 2,100 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Bag
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WAREHOUSE 2
Amount: 66934 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **UOP Types Spa 1 & 2**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Waste Water/Oil**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)

Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: In Process Only

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **3D TRASAR 3DT394**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 30,525 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 25,437 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooing Tower 294 - M5 Nalco 3DT394 Storage Tank
Amount: 5088 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 137 - M16 Nalco 3DT394 Storage Tank
Amount: 25437 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **1, 3- Butadiene**
CAS #: 106-99-0 EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 74-98-6, Component: PROPANE, 1% Wt, Max Amt Code: 06
[ ] EHS, CAS: 106-99-0, Component: 1,3-BUTADIENE, 65% Wt, Max Amt Code: 12
[ ] EHS, CAS: 106-98-9, Component: 1-BUTENE, 1% Wt, Max Amt Code: 07
[ ] EHS, CAS: 590-18-1, Component: 2-BUTENE-CIS, 3% Wt, Max Amt Code: 10
[ ] EHS, CAS: 624-64-6, Component: 2-BUTENE-TRANS, 5% Wt, Max Amt Code: 10

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] EHS, CAS: 513-35-9, Component: 2-METHYL-2-BUTENE, 1% Wt, Max Amt Code: 07
[ ] EHS, CAS: 71-43-2, Component: BENZENE, 1% Wt, Max Amt Code: 07
[ ] EHS, CAS: 75-28-5, Component: ISOBUTANE, 5% Wt, Max Amt Code: 10
[ ] EHS, CAS: 115-11-7, Component: ISOBUTYLENE, 4% Wt, Max Amt Code: 10
[ ] EHS, CAS: 78-78-4, Component: ISOPENTANE, 2% Wt, Max Amt Code: 09
[ ] EHS, CAS: 106-97-8, Component: N-BUTANE, 6% Wt, Max Amt Code: 10
[ ] EHS, CAS: 463-49-0, Component: PROPADIENE, 1% Wt, Max Amt Code: 07

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 4,321,200 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: 2,160,600 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 229 - T-2194 Butadiene Concentrate Product Vessel
Amount: 2160600 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 229 - T-2195 Butadiene Concentrate Off Test Vessel
Amount: 2160600 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **ARGON**
CAS #: 7440-37-1 EHS: NO
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 271 pounds Maximum Amount code: 02 (100 - 499 pounds)
Average Daily Amount: N/A Average Daily Amount code: 02 (100 - 499 pounds)
Maximum amount in largest container: 271 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Maintenance Shop
Amount: 271 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **BENZENE**

CAS #: 71-43-2 EHS: NO

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 68,373,437 pounds Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: 41,088,173 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Pump House 11 - T-800 Benzene Storage Tank

Amount: 27285265 pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Pump House 11 - T-815 Benzene Storage Tank

Amount: 41088173 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CARBON DIOXIDE**

CAS #: 124-38-9 EHS: NO

[ ] Identical to previous year

[ ] Trade Secret

[x] Pure [ ] Mixture

[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 129,706 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: 129,706 pounds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: Ethylene Unit 1544 - FA-1001 CO2 Storage Vessel

Amount: 129706 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Advasol 150**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1127-76-0, Component: 1-ETHYLNAPHTHALENE, 3% Wt, Max Amt Code: 04

[ ] EHS, CAS: 90-12-0, Component: 1-METHYLNAPHTHALENE, 20% Wt, Max Amt Code: 06

[ ] EHS, CAS: 939-27-5, Component: 2-ETHYLNAPHTHALENE, 3% Wt, Max Amt Code: 04

[ ] EHS, CAS: 91-57-6, Component: 2-METHYLNAPHTHALENE, 20% Wt, Max Amt Code: 06

[ ] EHS, CAS: 92-52-4, Component: BIPHENYL, DIPHENYL, 4% Wt, Max Amt Code: 04

[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 10% Wt, Max Amt Code: 06

[ ] EHS, CAS: 28804-88-8, Component: NAPHTHALENE, DIMETHYL-, 20% Wt, Max Amt Code: 06

[ ] EHS, CAS: 28652-77-9, Component: TRIMETHYL NAPHTHALENES, 20% Wt, Max Amt Code: 06

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 106,534 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 09 (75,000 - 99,999 pounds)

Maximum amount in largest container: 106,534 pounds

No. days on-site: 365

STORAGE LOCATIONS

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - FB-203 Injection Oil Tank
Amount: 106534 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Aqua Ammonia (15%-30%)**
CAS #: 1336-21-6 EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1336-21-6, Component: AMMONIUM HYDROXIDE, 19% Wt, Max Amt Code: 06
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[x] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 109,403 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 109,403 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Boiler Unit 1041 - V6500 Ammonia Storage Tank
Amount: 109403 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Axens HC Liquid Catalyst (LD-143)**

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 80% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL(II) OXIDE, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Cyclohexane Unit 1741 - Process Only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Caustic 50%- Sodium Hydroxide**
CAS #: 1310-73-2 EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

MIXTURE COMPONENTS:

[ ] EHS, CAS: null, Component: PRODUCED WATER, 45% Wt, Max Amt Code: 10

[ ] EHS, CAS: 7647-14-5, Component: SODIUM CHLORIDE, 5% Wt, Max Amt Code: 06

[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 50% Wt, Max Amt Code: 10

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 289,819 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: 289,819 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: PS 294

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Ethylene Unit 1544 - FB-201 Caustic Storage Tank

Amount: 289819 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CYCLOHEXANE**

CAS #: 110-82-7 EHS: NO

[ ] Identical to previous year

[ ] Trade Secret

[x] Pure [ ] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 65,994,875 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 36,468,252 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump House 11 - T-816 Cyclohexane Storage Tank
Amount: 36468252 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump House 11 - T-822 Cyclohexane Storage Tank
Amount: 21230089 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump House 11 - T-834 Cyclohexane Off Test Storage Tank
Amount: 8296535 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **DAC/RPG**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 06/01/2023, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 95-63-6, Component: 1,3,4-TRIMETHYLBENZENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 106-99-0, Component: 1,3-BUTADIENE, 1% Wt, Max Amt Code: 10

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] EHS, CAS: 592-41-6, Component: 1-HEXENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 513-35-9, Component: 2-METHYL-2-BUTENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 83-32-9, Component: ACENAPHTHENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 92-52-4, Component: BIPHENYL, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 98-82-8, Component: CUMENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 287-92-3, Component: CYCLOPENTANE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 95-13-6, Component: INDENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 78-78-4, Component: ISOPENTANE, 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 78-79-5, Component: ISOPRENE, 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 106-97-8, Component: N-BUTANE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 85-01-8, Component: PHENANTHRENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 1330-20-7, Component: XYLENES, 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 71-43-2, Component: BENZENE, 60% Wt, Max Amt Code: 13
[ ] EHS, CAS: 542-92-7, Component: CYCLOPENTADIENE, 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 77-73-6, Component: DICYCLOPENTADIENE, 5% Wt, Max Amt Code: 11
[ ] EHS, CAS: 100-41-4, Component: ETHYLBENZENE, 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 142-82-5, Component: N-HEPTANE, 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 100-42-5, Component: STYRENE, 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 108-88-3, Component: TOLUENE, 5% Wt, Max Amt Code: 11
[ ] EHS, CAS: 110-54-3, Component: HEXANE (N), 2% Wt, Max Amt Code: 10
[ ] EHS, CAS: 86-73-7, Component: FLUORENE, 1% Wt, Max Amt Code: 10
[ ] EHS, CAS: 592-57-4, Component: CYCLOHEXA-1,3-DIENE, 1% Wt, Max Amt Code: 10

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 18,674,200 pounds Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 7,665,853 pounds
No. days on-site: 181

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 382 - T-2158 RPG Storage Tank
Amount: 5497468 pounds

[ ] Confidential

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 382 - T-2176 RPG Storage Tank
Amount: 5510879 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 382 - T-2177 RPG Storage Tank
Amount: 7665853 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Diesel Fuel**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 68476-34-6, Component: DIESEL FUEL NO. 2, 96% Wt, Max Amt Code: 10
[ ] EHS, CAS: 111-84-2, Component: NONANE, 2% Wt, Max Amt Code: 04
[ ] EHS, CAS: 111-65-9, Component: OCTANE, 1% Wt, Max Amt Code: 04
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 113,753 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 42,960 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Location: Vehicle Service Center - ERT Diesel Storage Tank
Amount: 7160 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Portable Diesel Tank No. 1
Amount: 1790 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Portable Diesel Tank No. 2
Amount: 1790 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 505 - Diesel Tank M2
Amount: 4547 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Furnace Area Portable Air Compressors
Amount: 14320 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 505 - Diesel Tank M1
Amount: 4547 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Pump Station 194 - TK1 Diesel Storage Tank
Amount: 7160 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Diesel Storage Tank No. 201322305 - North of Warehouse 2
Amount: 42960 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Administration Building - ADMINGEN2 Diesel Storage Tank
Amount: 5728 pounds

[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Boiler Unit 1041 - GEN6000TK Diesel Storage Tank
Amount: 23628 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Boiler Unit 1041 - P6701B Diesel Storage Tank
Amount: 537 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Central Control Room - CCRGEN1 Diesel Storage Tank
Amount: 5800 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Radio Tower Generator - West of Cooling Tower 294
Amount: 946 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Dimethyl Sulfide**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 75-18-3, Component: DIMETHYL SULFIDE, 100% Wt, Max Amt Code: 10
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds

Maximum Amount: 165,058 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 140,064 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cumene Feed Preparation Unit 1740 - XV9 DMS Storage Drum
Amount: 140064 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - FA-124 DMS Storage Tank
Amount: 24994 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **E Series Catalyst**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (FIBROUS FORMS), % Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[x] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds

No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **E-315 Lead Oxide in Alumina**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 78% Wt, Max Amt Code: 04
[ ] EHS, CAS: 1317-36-8, Component: LEAD OXIDE, 22% Wt, Max Amt Code: 02
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 2,100 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: 2,100 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 350 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WAREHOUSE 2
Amount: 2100 pounds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **EC3205A**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: Duplicate entry and different product name on SDS. Reflected in report as COMPTREN EC3205A.

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 05 (5,000 - 9,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Throughout the Plant

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Ethylene HP**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [ ] Liquid [x] Gas

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: Ethylene Unit 1544 - Process only

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Flammable Gas Mixture (2002)**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Skin corrosion or irritation [ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 03 (500 - 999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 03 (500 - 999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Cylinder
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: No Storage Above Threshold Quantities
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Flammable Gas Mixture 2102**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 75-83-2, Component: 2,2-DIMETHYLBUTANE, % Wt, Max Amt Code:
[ ] EHS, CAS: 463-82-1, Component: 2,2-DIMETHYLPROPANE, % Wt, Max Amt Code:
[ ] EHS, CAS: 7727-37-9, Component: NITROGEN, % Wt, Max Amt Code:
[ ] EHS, CAS: 107-83-5, Component: 2-METHYLPENTANE, % Wt, Max Amt Code:
[ ] EHS, CAS: 75-28-5, Component: ISOBUTANE, % Wt, Max Amt Code:
[ ] EHS, CAS: 78-78-4, Component: ISOPENTANE, % Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 03 (500 - 999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 03 (500 - 999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Cylinder
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: No Storage Above Threshold Quantities
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Flammable Gas Mixture**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 03 (500 - 999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 03 (500 - 999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Cylinder
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: No Storage Above Threshold Quantities
Amount: N/A pounds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **G-65S Catalyst**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL OXIDE, % Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (FIBROUS FORMS), % Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Gasoline**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 71-43-2, Component: BENZENE, 2% Wt, Max Amt Code: 03
[ ] EHS, CAS: 95-13-6, Component: 1H-INDENE, 1% Wt, Max Amt Code: 02
[ ] EHS, CAS: 98-82-8, Component: BENZENE, (1-METHYLETHYL-), 2% Wt, Max Amt Code: 03
[ ] EHS, CAS: 100-41-4, Component: BENZENE, ETHYL-, 2% Wt, Max Amt Code: 03
[ ] EHS, CAS: 25551-13-7, Component: BENZENE, TRIMETHYL-, 3% Wt, Max Amt Code: 03
[ ] EHS, CAS: 106-97-8, Component: BUTANE, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: 78-78-4, Component: BUTANE, 2-METHYL-, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: 110-82-7, Component: CYCLOHEXANE, 2% Wt, Max Amt Code: 03
[ ] EHS, CAS: 108-87-2, Component: CYCLOHEXANE, METHYL-, 3% Wt, Max Amt Code: 03
[ ] EHS, CAS: 287-92-3, Component: CYCLOPENTANE, 1% Wt, Max Amt Code: 02
[ ] EHS, CAS: 86290-81-5, Component: GASOLINE, 64% Wt, Max Amt Code: 06
[ ] EHS, CAS: 110-54-3, Component: HEXANE, 4% Wt, Max Amt Code: 04
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 1% Wt, Max Amt Code: 02

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 25,008 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 25,008 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Gasoline Tank No. 201322304 - North of Warehouse 2
Amount: 25008 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Hydrocarbon Liquid Flammable**
CAS #: UNKNOWN EHS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Process only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Hydrogen**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Cyclohexane Unit 1741 - Process Only
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Process Only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Methyl Alcohol**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 67-56-1, Component: METHANOL, 100% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 1,543 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)

Maximum amount in largest container: 1,543 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: Ethylene Unit 1544 - FA-429 Methanol Metering Tank

Amount: 1543 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Natural Gas (Methane)**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [ ] Liquid [x] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 106-97-8, Component: BUTANE, % Wt, Max Amt Code:

[ ] EHS, CAS: 74-84-0, Component: ETHANE, % Wt, Max Amt Code:

[ ] EHS, CAS: 74-82-8, Component: METHANE, % Wt, Max Amt Code:

[ ] EHS, CAS: 74-98-6, Component: PROPANE, % Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Ethylene Unit 1544 - Process Only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Nitrogen**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Process Only

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Nalco EC3005A Process Antifoulant**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: MODIFIED AMINO COMPOUND, 10% Wt, Max Amt Code: 04
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 10,191 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 6,880 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Laydown Yard - North of Laboratory
Amount: 3311 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. C46172 by FB-201 Caustic Storage Tank
Amount: 6880 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CHEMICAL NAME: **PROPANE**
CAS #: 74-98-6 EHS: NO
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cumene Feed Preparation Unit 1740 - Process Only
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Process Only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Propane-Propylene**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [ ] Liquid [x] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 74-98-6, Component: PROPANE, 19% Wt, Max Amt Code:

[ ] EHS, CAS: 115-07-1, Component: PROPYLENE, 80% Wt, Max Amt Code:

[ ] EHS, CAS: 106-98-9, Component: 1-BUTENE, 1% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)

Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: Cumene Feed Preparation Unit 1740 - Process Only

Amount: N/A pounds

[ ] Confidential

Container Type: Other

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: Ethylene Unit 1544 - Process Only

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Propylene**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Process Only
Amount: N/A pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Cumene Feed Preparation Unit 1740 - Process Only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Ethane**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[x] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Ethylene Unit 1544 - Process Only
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Nalco BT-2211**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 1% Wt, Max Amt Code: 02

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 21,360 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 12,460 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Boiler Unit 1041 - Tank Number C38343
Amount: 8900 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank Number C38418
Amount: 12460 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Nalco BT-3811**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 5% Wt, Max Amt Code: 04
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 22,080 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 12,880 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank Number C38419
Amount: 12880 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Boiler Unit 1041 - Tank Number C38344
Amount: 9200 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **3D TRASAR 3DT178**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7320-34-5, Component: POTASSIUM TETRAPYRO PHOSPHATE, 30% Wt, Max Amt Code: 06
[ ] EHS, CAS: 16068-46-5, Component: POTASSIUM PHOSPHATE, 30% Wt, Max Amt Code: 06
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 40,137 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 34,403 pounds
No. days on-site: 365

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 294 - M6 Nalco 3DT178 Storage Tank
Amount: 5734 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 137 - M17 Nalco 3DT178 Storage Tank
Amount: 34403 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Nalco 8344 Iron Remover**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 77-92-9, Component: CITRIC ACID, 60% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 4,001 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 2,078 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Laydown Yard - North of Laboratory
Amount: 1923 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. 35824 by DA-101 Quench Water Tower System
Amount: 2078 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **3D TRASAR 3DT401**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 5% Wt, Max Amt Code: 03
[ ] EHS, CAS: 10102-40-6, Component: SODIUM MOLYBDATE DIHYDRATE, 30% Wt, Max Amt Code: 05
[ ] EHS, CAS: 64665-57-2, Component: SODIUM TOLYLTRIAZOLE, 5% Wt, Max Amt Code: 03
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 17,768 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 3,966 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Laydown Yard - North of Laboratory

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

Amount: 17768 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Petroflo 20Y3460**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1544 Ethylene Unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Microbiocide**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[x] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **PuriStar R3-12 Catalyst Tablets**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: COPPER OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 7782-42-5, Component: GRAPHITE (NATURAL), 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-13-2, Component: ZINC OXIDE, 30% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Self-heating
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **S-10F**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 90% Wt, Max Amt Code:
[ ] EHS, CAS: 20667-12-3, Component: SILVER OXIDE, 10% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **AR-201-E**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 80% Wt, Max Amt Code:
[ ] EHS, CAS: 1317-36-8, Component: LEAD OXIDE YELLOW, 20% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[x] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **HF200XP 1/8"**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), 95% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-59-3, Component: DISODIUM OXIDE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **DILUTE SULFURIC ACID**
CAS #: 7664-93-9 EHS: YES
INACTIVE DATE: 12/31/2022, REASON: Not dilute sulfuric acid. Entering as new chemical - Sulfuric Acid for proper chemical identification.

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[x] EHS, CAS: 7664-93-9, Component: SULFURIC ACID, 93% Wt, Max Amt Code: 01
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[x] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: 48,208 pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Never Stored or Used Dilute Sulfuric Acid
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Exx-Wash 190**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 1% Wt, Max Amt Code: 01
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 9% Wt, Max Amt Code: 01
[ ] EHS, CAS: 64742-94-5, Component: SOLVENT NAPHTHA, HEAVY AROMATIC, 90% Wt, Max Amt Code: 01
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - FB-203 Injection Oil Tank
Amount: 0 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SR-112DMP**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 30% Wt, Max Amt Code:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] EHS, CAS: , Component: MANGANESE DIOXIDE, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 1314-13-2, Component: ZINC OXIDE, 25% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)

Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 0

STORAGE LOCATIONS

[ ] Confidential

Container Type: Other

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: No Longer Stored

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Arsenal EC3473A**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 16940-66-2, Component: SODIUM BOROHYDRIDE, 30% Wt, Max Amt Code: 04

[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 60% Wt, Max Amt Code: 05

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 15,490 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: 4,676 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Tote Bin

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Ethylene Unit 1544 - Tank No. 16265
by DA-201 Caustic and Water Wash Tower

Amount: 4676 pounds

[ ] Confidential

Container Type: Tote Bin

Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature

Location: Laydown Yard - North of Laboratory

Amount: 10814 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **E 235 T 1/8" RS**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 7782-42-5, Component: A 3 (GRAPHITE), 5% Wt, Max Amt Code: 04

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 25% Wt, Max Amt Code: 05

[ ] EHS, CAS: 7440-02-0, Component: NICKEL, 25% Wt, Max Amt Code: 05

[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 45% Wt, Max Amt Code: 06

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 26,602 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 26,602 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 350 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: WAREHOUSE PAVILION
Amount: 2100 pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: OUTSIDE STORAGE - NORTH SIDE OF WAREHOUSE 2
Amount: 24502 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NALCO EC3053A Process Antifoulant**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: SUBSTITUTED PHENOL 2, 10% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: SUBSTITUTED PHENOL 3, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: SUBSTITUTED PHENOL 4, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: SUBSTITUTED AROMATIC AMINE, 40% Wt, Max Amt Code: 04
[ ] EHS, CAS: , Component: SUBSTITUTED PHENOL 1, 40% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 3,120 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 3,120 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. 82714
Pygas(C5+)
Amount: 3120 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **COMPTRENE EC3205A**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 5% Wt, Max Amt Code: 03
[ ] EHS, CAS: , Component: SUBSTITUTED AROMATIC AMINE, 1% Wt, Max Amt Code: 02
[ ] EHS, CAS: 3710-84-7, Component: DIETHYLHYDROXYLAMINE, 29% Wt, Max Amt Code: 04
[ ] EHS, CAS: 64742-94-5, Component: HEAVY AROMATIC NAPHTHA, 60% Wt, Max Amt Code: 05
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 5% Wt, Max Amt Code: 03

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 14,980 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 14,980 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. N80120
by GB-201 cracked Gas Compressor System
Amount: 14980 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Petroflo 23Y957**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NEVER REQUIRED TO REPORT THIS CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 02 (100 - 499 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: 2,220 pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential

Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 1544 - DA 201 Tower
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Activated Alumina D-201 3x6**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 12/31/2022, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE (NON-FIBROUS), % Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 0

STORAGE LOCATIONS
[ ] Confidential
Container Type: Other
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: No Longer Stored
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ACTRENE EC3267A Process Antifoulant**

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 10% Wt, Max Amt Code: 03
[ ] EHS, CAS: , Component: SUBSTITUTED PHENOL 2, 3% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: SUBSTITUTED PHENOL 1, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: SUBSTITUTED AROMATIC AMINE, 10% Wt, Max Amt Code: 03
[ ] EHS, CAS: 3710-84-7, Component: DIETHYLHYDROXYLAMINE, 10% Wt, Max Amt Code: 03
[ ] EHS, CAS: 64742-94-5, Component: HEAVY AROMATIC NAPHTHA, 60% Wt, Max Amt Code: 05
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 2% Wt, Max Amt Code: 02

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 9,036 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 4,604 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. 15447
by DA-202 Condensate Stripper
Amount: 4604 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Laydown Yard - North of Laboratory
Amount: 4432 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

No additional chemical information is required by Texas

CHEMICAL NAME: **ACTRENE EC3269A Process Antifoulant**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 3710-84-7, Component: DIETHYL-HYDROXY-AMINE, 10% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: SUBSTITUTED AROMATIC AMINE, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: SUBSTITUED PHENOL, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: , Component: PARAFFINIC OIL, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: 91-20-3, Component: NAPHTHALENE, 10% Wt, Max Amt Code: 02
[ ] EHS, CAS: 64742-94-5, Component: HEAVY AROMATIC NAPTHA, 60% Wt, Max Amt Code: 04
[ ] EHS, CAS: 95-63-6, Component: 1,2,4-TRIMETHYLBENZENE, 5% Wt, Max Amt Code: 02

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 3,000 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 3,000 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Ethylene Unit 1544 - Tank No. 74879
by DA-202 Condensate Stripper
Amount: 3000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **H-550**

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 111-30-8, Component: GLUTARALDEHYDE, 50% Wt, Max Amt Code: 04
[ ] EHS, CAS: 67-56-1, Component: METHANOL, 1% Wt, Max Amt Code: 01

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 3,629 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 3,629 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Laydown Yard - North of Laboratory
Amount: 3629 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SULFURIC ACID 93%**
CAS #: 7664-93-9 EHS: YES

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[x] EHS, CAS: 7664-93-9, Component: SULFURIC ACID, 93% Wt, Max Amt Code: 08

[ ] EHS, CAS: 7732-18-5, Component: WATER, 7% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 56,472 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)

Maximum amount in largest container: 48,208 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Cooling Tower 137 - M15X Acid Storage Tank

Amount: 48208 pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Cooling Tower 294 - M4X Acid Storage Tank

Amount: 8264 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NALSPERSE 73550**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: , Component: NONIONIC SURFACTANT, 60% Wt, Max Amt Code: 05

[ ] EHS, CAS: , Component: NONIONIC ALKYL POLYGLYCOSIDE, 30% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 14,680 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 7,340 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 137 - Tank Number C45954
Amount: 7340 pounds

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 294 - Tank Number C45953
Amount: 7340 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **SODIUM HYPOCHLORITE 12.5%**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 5% Wt, Max Amt Code: 05
[ ] EHS, CAS: 7681-52-9, Component: SODIUM HYPOCHLORITE, 13% Wt, Max Amt Code: 06

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Self-heating
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 158,566 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: 119,534 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 137 - M16X Bleach Storage Tank
Amount: 119534 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower 294 - M11 Bleach Storage Tank
Amount: 39032 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **THUNDERSTORM W813A 1X3 AR-AFFF FIRE FIGHTING FOAM**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 112-34-5, Component: 2-(2-BUTOXYETHOXY)ETHANOL, 7% Wt, Max Amt Code: 04
[ ] EHS, CAS: 132778-08-6, Component: D-GLUCOPYRANOSIDE, C9-C11 OLIGOMER, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: 107-21-1, Component: ETHYLENE GLYCOL, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: , Component: POLYFLUORIANTED ALKYL BETAINE, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: , Component: POLYFLUORINATED ALKYL POLYMIDE, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: 142-87-0, Component: SODIUM DECYL SULFATE, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: 142-31-4, Component: SODIUM OCTYL SULFATE, 5% Wt, Max Amt Code: 04

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 27,848 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: 2,321 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Fire Station
Amount: 27848 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NexGuard 22352**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 100-37-8, Component: DIETHYLETHANOLAMINE, 5% Wt, Max Amt Code: 02
[ ] EHS, CAS: 1310-58-3, Component: POTASSIUM HYDROXIDE, 5% Wt, Max Amt Code: 02

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 3,800 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: 3,800 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cyclohexane Unit 1741 - Tank Number 65734
Amount: 3800 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Tri-ACT 1800**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[x] EHS, CAS: 108-91-8, Component: CYCLOHEXYLAMINE, 10% Wt, Max Amt Code: 03
[ ] EHS, CAS: 5332-73-0, Component: METHOXYPROPYLAMINE, 30% Wt, Max Amt Code: 04
[ ] EHS, CAS: 141-43-5, Component: MONOETHANOLAMINE, 30% Wt, Max Amt Code: 04
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 8,300 pounds Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 8,300 pounds
No. days on-site: 365

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Boiler Unit 1041 - TK-6810
Amount: 8300 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **HC-1025 Solution of Nickel Complex in Cyclohexane**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 3002-63-9, Component: ALUMINIUM 2-ETHYLHEXANOATE, 35% Wt, Max Amt Code: 05
[ ] EHS, CAS: , Component: ALUMINUM ALKYLS, 5% Wt, Max Amt Code: 04
[ ] EHS, CAS: 110-82-7, Component: CYCLOHEXANE, 55% Wt, Max Amt Code: 06
[ ] EHS, CAS: 7440-02-0, Component: NICKEL, 5% Wt, Max Amt Code: 04
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 26,460 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 17,420 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 2,640 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tote Bin
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: 1741 Liquid Catalyst Storage Building
Amount: 26460 pounds

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **3DT098**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 202420-04-0, Component: CHLOROTOLYLTRIAZOLE SODIUM SALT, 20% Wt, Max Amt Code: 04

[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 5% Wt, Max Amt Code: 03

[ ] EHS, CAS: 64665-57-2, Component: SODIUM TOLYLTRIAZOLE, 5% Wt, Max Amt Code: 03

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 11,304 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: 7,536 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Cooling Tower 137 - Tank Number C13129

Amount: 7536 pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Cooling Tower 294 - Tank Number 95557

Amount: 3768 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

Facility Name: CHEVRON PHILLIPS CHEMICAL - PORT ARTHUR FACILITY

No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:

[ ] Initial [ ] Updated [x] Annual

TXT2 Number: 16251

TCEQ Regulated Entity Number (RN): RN100209857

TCEQ Customer Number (CN): CN600303614

Facility was Purchased or First Time Reporting Hazardous Substances: NO

Effective Date: N/A

Facility was Sold, Closed or No Longer Stores Hazardous Substances: NO

Inactive Date: N/A

STATE / LOCAL FEES: $300

[x] I have attached a site plan

[ ] I have attached a list of site coordinate abbreviations

[ ] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

Port Arthur Plant Map.pdf

Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 79
and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Mark Flowers, Emergency Response Supervisor		02/27/2024
Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date Signed

Facility Name: CHEVRON USA

FACILITY IDENTIFICATION:

CHEVRON USA
Dept: N/A
Physical Address: N/A
Mailing Address: PO BOX G, PORT ARTHUR, TX 77641-0237
Geographic Location: 0.6 MI SW OF INTX OF LEVEE RD/HWY 82, AT THE END OF WEST 7TH ST.
, 77640
County: JEFFERSON
Latitude: 29.844482
Longitude: -93.964569
Fire Department: Port Arthur Fire Department
LEPC: Jefferson LEPC

[x] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: 1382555
NAICS: 324191 (Petroleum Lubricating Oil and Grease Manufacturing)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 187

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [x] Yes [ ] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [ ] Yes [x] No

CONTACT INFORMATION:

Veronica Chavez
Organization: CHEVRON U.S.A. INC.
Title: GULF COAST OPERATIONS MANAGER
Contact Type(s): OWNER / OPERATOR
Address: W 7TH ST, PORT ARTHUR, TX, 77640
Phones: Work Phone: 409-985-3002
Email: VERONICACHAVEZ@CHEVRON.COM

Jonh Cattolico
Title: HSE FIELD SPECIALIST
Contact Type(s): BILLING CONTACT, EMERGENCY CONTACT, FAC. EMERGENCY COORDINATOR, SAFETY MANAGER, TIER II INFORMATION CONTACT
Address: 7 W TH ST, PORT ARTHUR, TX, 77640
Phones: 24-Hour: 346-240-6250 Work Phone: 409-985-3007
Email: JCATT@CHEVRON.COM

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **DELO SYN-GREASE SFE EP 0**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: CHEVRON USA

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 14,040 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: 14,040 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAV UNIV PRMX 50/50AFC**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON USA

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 14,608 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 14,608 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV ULTI-PLX GRS EP NLGI2**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 41,280 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 41,280 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

Facility Name: CHEVRON USA

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAV UNIVERSAL AF/C CON**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 10,403 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 10,403 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV OPN GL GRD 250 NC (NRD#LT)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: CHEVRON USA

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 109,560 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: 109,560 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO GEAR EP5 85W140**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON USA

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 86,735 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 86,735 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV Meropa**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 256,756 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 256,756 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

Facility Name: CHEVRON USA

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ULTRA DUTY HD 2 (120#NRQD)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 142,560 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 142,560 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **BLACK PEARL SRI 2 (NRD#LT)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: CHEVRON USA

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 119,603 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: 119,603 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAV FULL SYN MV ATF**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON USA

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 84,452 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 84,452 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHEVRON SUPREME SYNTHETIC MOTOR OIL SAE 5W-30**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 31,729 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 31,729 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

Facility Name: CHEVRON USA

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV SOLUBLE OIL B**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 45,610 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 45,610 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAV GLOBAL MV ATF**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: CHEVRON USA

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 33,404 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)

Average Daily Amount: 33,404 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV CETUS ELITESYN NG 100**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON USA

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 61,628 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 61,628 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO SYN ATF 668**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 75,689 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 75,689 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

Facility Name: CHEVRON USA

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO GRS EP 2**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 250,776 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 250,776 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HYDRAULIC OIL 5606A**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: CHEVRON USA

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 78,061 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 78,061 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV COMPRESSOR OIL 260 (208L REG)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON USA

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 47,476 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 47,476 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO G/L ESI 80W-90 (NRD#LT)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 14,608 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 14,608 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

Facility Name: CHEVRON USA

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **METHYL 12-HYDROXYSTEARATE**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 73,482 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 73,482 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV CETUS PAO HC**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

Facility Name: CHEVRON USA

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 53,128 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)

Average Daily Amount: 53,128 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CV SUPR SYNBLD 5W30**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

Facility Name: CHEVRON USA

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 31,729 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 31,729 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Distillates (petroleum)**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field

Facility Name: CHEVRON USA

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Grease**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Varies
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Gasoline additives**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **ASPHALT**

CAS #: 8052-42-4 EHS: NO

INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization

Facility Name: CHEVRON USA

[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Greater Than Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Hydraulic Oil**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Base Oil, Paraffinic**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 1,480,896 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: 1,480,896 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **BATTERY FLUID, SULFURIC ACID**
CAS #: 7664-93-9 EHS: YES

[x] Identical to previous year

Facility Name: CHEVRON USA

[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 05 (5,000 - 9,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Fork Trucks
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Oloa Additives**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 74499-35-7, Component: BRANCHED ALKYLPHENOL AND CALCIUM BRANCHED ALKYLPHENOL, 5% Wt, Max Amt Code:

[ ] EHS, CAS: , Component: HIGHLY REFINED MINERAL OIL, 35% Wt, Max Amt Code:

[ ] EHS, CAS: 68649-42-3, Component: ZINC ALKLYL DITHIOPHOSPHATE, 20% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas

Facility Name: CHEVRON USA

[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 1,365,630 pounds Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: 1,365,630 pounds Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: West Tank Field
Amount: 172498 pounds

[ ] Confidential
Container Type: Tank Inside Building
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: 3rd Floor
Amount: 89801 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Lubrizol Additives**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 101-02-0, Component: ARYL PHOSPHITE, 5% Wt, Max Amt Code: 06
[ ] EHS, CAS: , Component: BUTYLATED PHENOL, 21% Wt, Max Amt Code: 06
[ ] EHS, CAS: , Component: CALCIUM SOLFONATE, 5% Wt, Max Amt Code: 06
[ ] EHS, CAS: , Component: ZINC ALKYLDITHIPHOSPHATE, 60% Wt, Max Amt Code: 06

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)

Facility Name: CHEVRON USA

[ ] Self-heating [ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 509,199 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 509,199 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: West Tank Field
Amount: 40136 pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Blending/compounding
Amount: 3475 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **MINERAL OIL**

CAS #: 8012-95-1 EHS: NO

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 11,350,529 pounds Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: 11,350,529 pounds Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Steel Drum

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Additive Warehouse

Amount: N/A pounds

[ ] Confidential

Container Type: Tank Inside Building

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Additive Wareshouse

Amount: N/A pounds

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: West Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Lubricating Oil Additives**

CAS #: UNKNOWN EHS:

INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: West Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **ETHYLENE GLYCOL (Anti-freeze)**
CAS #: 107-21-1 EHS:
INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Plastic Bottles Or Jugs

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Product Warehouse
Amount: N/A pounds

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Warehouse
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **LEAD**
CAS #: 7439-92-1 EHS: NO

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7440-36-0, Component: ANTIMONY, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 7439-92-1, Component: LEAD, 60% Wt, Max Amt Code:
[ ] EHS, CAS: 1309-60-0, Component: LEAD DIOXIDE, 25% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 75,465 pounds Maximum Amount code: 09 (75,000 - 99,999 pounds)
Average Daily Amount: 75,465 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: 2,700 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Forklift

Facility Name: CHEVRON USA

Amount: 2700 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Lubricating Oils (petroleum), C20-50**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Lubricating Oil, Synthetic**
CAS #: UNKNOWN EHS:
INACTIVE DATE: 02/28/2024, REASON: FACILITY NO LONGER REQUIRED TO REPORT CHEMICAL

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV Clarity HY OL AW**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[ ] Skin corrosion or irritation
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 130,572 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 130,572 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV GST ADV EP 46 (55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:
[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:
[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 10,956 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 10,956 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **DELO GREASE ESI EP 2**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 720,000 pounds Maximum Amount code: 11 (500,000 - 999,999 pounds)
Average Daily Amount: 720,000 pounds Average Daily Amount code: 11 (500,000 - 999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV CETUS ELITESYN NG 150 (275G IBC)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 11,413 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: 11,413 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CV SUPR SYNBLD 5W20**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[x] Skin corrosion or irritation [ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 224,930 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 224,930 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV ATF MD-3(55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 14,231 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 14,231 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO ELC AF/C**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 13,238 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 13,238 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **MULTIFAK EP 2**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 1,604 pounds Maximum Amount code: 04 (1,000 - 4,999 pounds)

Average Daily Amount: 1,604 pounds Average Daily Amount code: 04 (1,000 - 4,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **HiTEC 12204L**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[x] Skin corrosion or irritation
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 54,767 pounds
Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 54,767 pounds
Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO G/L ESI 85W140**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 32,411 pounds
Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 32,411 pounds
Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAV CONV PRMX 50/50AFC (55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 18,260 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 18,260 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Infinuem**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 59,599 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)

Average Daily Amount: 59,599 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO ELC PRMX 50/50**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[ ] Skin corrosion or irritation
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 53,498 pounds
Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 53,498 pounds
Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV ATF HD 389**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 10,956 pounds
Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 10,956 pounds
Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAV CONV AF/C CON (55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 16,434 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 16,434 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV Taro**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 354,908 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: 354,908 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV SYNFLUID PAO 6 HVI**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[x] Skin corrosion or irritation [ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 115,757 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 115,757 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV GST ADV EP 32 (55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 10,956 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 10,956 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO SYNTRANS XE 75W90**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 10,500 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 10,500 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Anglamol**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 139,312 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: 139,312 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **MULTIFAK EP BASE OIL PRMX**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[ ] Skin corrosion or irritation
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 149,898 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 149,898 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAV XTEND LIFE 50/50**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:
[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:
[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 57,062 pounds Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: 57,062 pounds Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HAVOLINE ATF MD-3**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 21,912 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 21,912 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV RANDO HD ISO 10(55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 14,608 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: 14,608 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **VALERO VALPAR 165**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[x] Skin corrosion or irritation
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 128,986 pounds
Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 128,986 pounds
Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV Cetus Hipersyn**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 177,843 pounds
Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 177,843 pounds
Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV ATF HD 389 (55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 14,652 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 14,652 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HD PF AF/C CON (55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture

Facility Name: CHEVRON USA

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 10,956 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)

Average Daily Amount: 10,956 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: Tank Field

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO GEAR LS 80W90**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: CHEVRON USA

[x] Skin corrosion or irritation [ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 130,206 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 130,206 pounds Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV HD PF AF/C PRMX 50/50(55/208DR)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 38,802 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 38,802 pounds Average Daily Amount code: 07 (25,000 - 49,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Facility Name: CHEVRON USA

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CHV DELO SYN-TRANS HD 50**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 10,956 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 10,956 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank Field
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

FACILITY STATE FIELDS:
Texas requests the following:
[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 73510
TCEQ Regulated Entity Number (RN): RN110332434
TCEQ Customer Number (CN): CN600132484

Facility Name: CHEVRON USA

Facility was Purchased or First Time Reporting Hazardous Substances: NO
Effective Date: N/A
Facility was Sold, Closed or No Longer Stores Hazardous Substances: NO
Inactive Date: N/A

STATE / LOCAL FEES: $300

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

N/A

Certification (Read and sign after completing all sections)
I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 54
and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

John Cattolico, HSE Specialist		02/29/2024
Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date Signed

Facility Name: EL VISTA TERMINAL

FACILITY IDENTIFICATION:

EL VISTA TERMINAL
Dept: Valero Partners PAPS, LLC
Physical Address: 6300 W PORT ARTHUR RD, PORT ARTHUR, TX 77640-1963
Mailing Address: PO BOX 696000, MS E2A, SAN ANTONIO, TX 78269-6000
Geographic Location:
County: JEFFERSON
Latitude: 29.898
Longitude: -94.0035
Fire Department: Port Arthur Fire Department
LEPC: Jefferson LEPC

[x] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: 9391250
NAICS: 486910 (Pipeline Transportation of Refined Petroleum Products)

Is the facility manned? [ ] Manned [x] Unmanned
Maximum No. of Occupants: 0

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [ ] Yes [x] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [ ] Yes [x] No

CONTACT INFORMATION:

Harman Singh
Organization: VALERO PARTNERS PAPS LLC
Title: MANAGER ENVIRONMENTAL
Contact Type(s): TIER II INFORMATION CONTACT
Address: 1 VALERO WAY, MS E2A, SAN ANTONIO, TX, 78249
Phones: 24-Hour: 832-331-2844 Work Phone: 210-345-5637
Email: HARMAN.SINGH@VALERO.COM

Ge Song
Organization: VALERO PARTNERS PAPS LLC
Title: ENVIRONMENTAL ENGINEER
Contact Type(s): BILLING CONTACT, SUBMITTER, TIER II INFORMATION CONTACT
Address: 1 VALERO WAY, E2A, SAN ANTONIO, TX, 78249
Phones: Cell Phone: 469-207-8063 Work Phone: 210-345-5401
Email: GE.SONG@VALERO.COM

Robert Staggs
Title: MGR HEALTH, SAFETY & ENVIRONMENTAL - P&T
Contact Type(s): EMERGENCY CONTACT
Address: 9405 W PORT ARTHUR RD, BEAUMONT, TX, 77705
Phones: 24-Hour: 281-455-1268 Work Phone: 713-672-3339
Email: ROBERT.STAGGS@VALERO.COM

Jody Lambright
Organization: VALERO PARTNERS PAPS LLC
Title: MANAGER AREA PIPELINES & TERMINALS
Contact Type(s): EMERGENCY CONTACT, FAC. EMERGENCY COORDINATOR, OWNER / OPERATOR

Facility Name: EL VISTA TERMINAL

Address: 9405 W PORT ARTHUR RD, BEAUMONT, TX, 77705
Phones: 24-Hour: 409-673-7612 Work Phone: 409-839-3518
Email: JODY.LAMBRIGHT@VALERO.COM

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **Transmix**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: Transmix, 100% Wt, Max Amt Code: 10
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 169,812 pounds Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: 84,906 pounds Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: 114,610 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 4420
Amount: 55202 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 4421
Amount: 114610 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Gasoline**
CAS #: 8006-61-9 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 86290-81-5, Component: Gasoline, 100% Wt, Max Amt Code: 13

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 320,166,000 pounds
Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: 160,083,000 pounds
Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: 47,892,600 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2034
Amount: 47892600 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2035
Amount: 47892600 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2036
Amount: 47892600 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2037
Amount: 47892600 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2038
Amount: 37837800 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2039
Amount: 37837800 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2078
Amount: 26460000 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2079
Amount: 26460000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:
[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 73829
TCEQ Regulated Entity Number (RN): RN100219716
TCEQ Customer Number (CN): CN604738930
Facility was Purchased or First Time Reporting Hazardous Substances: NO
Effective Date: N/A
Facility was Sold, Closed or No Longer Stores Hazardous Substances: NO
Inactive Date: N/A

STATE / LOCAL FEES: $50

[x] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[x] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

EL VISTA BOUNDARY SHEET 09-01-13.pdf
El Vista Fire Final.pdf

Facility Name: EL VISTA TERMINAL

El Vista Spill FINAL.pdf

Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 5 and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Ge Song, Environmental Engineer	Ge Song	02/20/2024
Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date Signed

Facility Name: GT OMNIPORT MARINE DOCK (This is a draft report)

FACILITY IDENTIFICATION:

GT OMNIPORT MARINE DOCK
Dept: N/A
Physical Address: 2350 S GULFWAY DR, PORT ARTHUR, TX 77640-4539
Mailing Address: 16211 LA CANTERA PKWY STE 202, SAN ANTONIO, TX 78256-2452
Geographic Location:
County: JEFFERSON
Latitude: 29.82144
Longitude: -93.965644
Fire Department: Port Arthur Fire Dept
LEPC: Jefferson LEPC

[x] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: N/A
NAICS: 488320 (Marine Cargo Handling)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 22

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [ ] Yes [x] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [ ] Yes [x] No

CONTACT INFORMATION:

Wei Yang
Organization: HOWARD ENERGY PARTNERS
Organization: HOWARD ENERGY PARTNERS
Title: ENVIRONMENTAL SPECIALIST
Contact Type(s): TIER II INFORMATION CONTACT, BILLING CONTACT
Address: 16211 LA CANTERA PKWY STE 202, SAN ANTONIO, TX 78256-2452
Phones: WORK PHONE: 210-757-4351
Email: WYANG@HOWARDEP.COM

Gerald Lavergne
Organization: GT LOGISTICS LLC
Organization: GT LOGISTICS LLC
Title: EHS & PSM COORDINATOR
Contact Type(s): EMERGENCY CONTACT, FACILITY EMERGENCY COORDINATOR, SAFETY MANAGER
Address: 1998 HIGHWAY 73, PORT ARTHUR, TX 77640-1759
Phones: 24-HOUR: 409-719-7468 WORK PHONE: 409-983-5350
Email: GLAVERGNE@HOWARDEP.COM

Mike Northcutt
Organization: GT LOGISTICS LLC
Organization: GT LOGISTICS LLC
Title: DIRECTOR OF TERMINAL OPERATIONS
Contact Type(s): OWNER OPERATOR CONTACT
Address: 1998 HIGHWAY 73, PORT ARTHUR, TX 77640-1759
Phones: CELL PHONE: 904-629-4795
Email: MNORTHCUTT@HOWARDEP.COM

Facility Name: GT OMNIPORT MARINE DOCK (This is a draft report)

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **Renewable Diesel**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature

Location: by the dock

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NITROGEN**

CAS #: 7727-37-9 EHS: NO

[x] Identical to previous year

[ ] Trade Secret

[x] Pure [ ] Mixture

[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)

Facility Name: GT OMNIPORT MARINE DOCK (This is a draft report)

[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: by the dock
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **BUTANE**
CAS #: 106-97-8 EHS: NO

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)

Facility Name: GT OMNIPORT MARINE DOCK (This is a draft report)

Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: north of the site
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **MTBE**
CAS #: 1634-04-4 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: south of facility
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: GT OMNIPORT MARINE DOCK (This is a draft report)

CHEMICAL NAME: **GASOLINE**
CAS #: null EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: south of the facility
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:
[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 101498
TCEQ Regulated Entity Number (RN): RN102509676
TCEQ Customer Number (CN): CN605381490
During this reporting year, was this facility sold to another company, or did it close operations or discontinue storing reportable quantities of hazardous substances? NO
Effective Date:

STATE / LOCAL FEES: $0

Facility Name: GT OMNIPORT MARINE DOCK (This is a draft report)

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

N/A

Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 6 and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date Signed

Facility Name: GT LOGISTICS RAIL YARD (This is a draft report)

FACILITY IDENTIFICATION:

GT LOGISTICS RAIL YARD
Dept: N/A
Physical Address: 1998 HIGHWAY 73, PORT ARTHUR, TX 77640-1759
Mailing Address: 16211 LA CANTERA PKWY STE 202, SAN ANTONIO, TX 78256-2452
Geographic Location:
County: JEFFERSON
Latitude: 29.863056
Longitude: -93.995555
Fire Department: Port Arthur Fire Dept.
LEPC: Jefferson LEPC

[x] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: N/A
NAICS: 488320 (Marine Cargo Handling)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 60

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [ ] Yes [x] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [ ] Yes [x] No

CONTACT INFORMATION:

Wei Yang
Organization: HOWARD ENERGY PARTNERS
Organization: HOWARD ENERGY PARTNERS
Title: ENVIRONMENTAL SPECIALIST
Contact Type(s): TIER II INFORMATION CONTACT, BILLING CONTACT
Address: 16211 LA CANTERA PKWY STE 202, SAN ANTONIO, TX 78256-2452
Phones: WORK PHONE: 210-757-4351
Email: WYANG@HOWARDEP.COM

Mike Northcutt
Organization: GT LOGISTICS LLC
Organization: GT LOGISTICS LLC
Title: DIRECTOR OF TERMINAL OPERATIONS
Contact Type(s): OWNER OPERATOR CONTACT
Address: 1998 HIGHWAY 73, PORT ARTHUR, TX 77640-1759
Phones: CELL PHONE: 904-629-4795
Email: MNORTHCUTT@HOWARDEP.COM

Mark Canales
Organization: HOWARD ENERGY PARTNERS
Organization: HOWARD ENERGY PARTNERS
Title: EHS & PSM COORDINATOR
Contact Type(s): EMERGENCY CONTACT, FACILITY EMERGENCY COORDINATOR, SAFETY MANAGER
Address: 1998 HIGHWAY 73, PORT ARTHUR, TX 77640-1759
Phones: 24-HOUR: 210-573-6132 EMERGENCY: 210-573-6132
Email: MCANALES@HOWARDEP.COM

Facility Name: GT LOGISTICS RAIL YARD (This is a draft report)

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **animal fat**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: by the rail
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **renewable diesel**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)

Facility Name: GT LOGISTICS RAIL YARD (This is a draft report)

[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: by the rail
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **CORN OIL**
CAS #: 8001-30-7 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: by the rail
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **used cooking oil**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 13 (10 MILLION + pounds)
Average Daily Amount: N/A Average Daily Amount code: 13 (10 MILLION + pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: by the rail
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: GT LOGISTICS RAIL YARD (This is a draft report)

CHEMICAL NAME: **DIESEL FUEL**
CAS #: null EHS: NO

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Rail Car
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Center of Facility
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Southside of terminal
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NITROGEN**
CAS #: 7727-37-9 EHS: NO

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture

[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 07 (25,000 - 49,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Less Than Ambient Pressure Temp: Less Than Ambient Temperature (not Cryogenic)

Location: Center of site

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **GASOLINE**

CAS #: null EHS: NO

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant

Facility Name: GT LOGISTICS RAIL YARD (This is a draft report)

[ ] Skin corrosion or irritation [ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Southside of
Facility
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **PROPANE**
CAS #: 74-98-6 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 01 (00 - 99 pounds)
Average Daily Amount: N/A Average Daily Amount code: 01 (00 - 99 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential

Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Southside of site near barge dock
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Coil Guard 240 (clayton)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[x] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: by the rail
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Propylene/Propane mixture (PP mix)**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret

Facility Name: GT LOGISTICS RAIL YARD (This is a draft report)

[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 12 (1,000,000 - 9,999,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 12 (1,000,000 - 9,999,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: by the rail
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:

[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 101498
TCEQ Regulated Entity Number (RN): RN106114168
TCEQ Customer Number (CN): CN605381490
During this reporting year, was this facility sold to another company, or did it close operations or discontinue storing reportable quantities of hazardous substances? NO
Effective Date:

STATE / LOCAL FEES: $0

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

N/A

Facility Name: GT LOGISTICS RAIL YARD (This is a draft report)

Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 10
and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date Signed

Facility Name: LUCAS STATION

FACILITY IDENTIFICATION:

LUCAS STATION
Dept: VALERO TERMINALING AND DISTRIBUTION COMPANY
Physical Address: 9405 W PORT ARTHUR RD, BEAUMONT, TX 77705-9294
Mailing Address: 9405 W PORT ARTHUR RD, BEAUMONT, TX 77705-9294
Geographic Location:
County: JEFFERSON
Latitude: 29.9933
Longitude: -94.0772
Fire Department: Beaumont Fire/Rescue
LEPC: Jefferson LEPC

[x] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: 963555222
NAICS: 486110 (Pipeline Transportation of Crude Oil)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 5

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [x] Yes [ ] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [ ] Yes [x] No

CONTACT INFORMATION:

Ge Song
Organization: VALERO TERMINALING AND DISTRIBUTION COMPANY
Title: ENVIRONMENTAL ENGINEER
Contact Type(s): BILLING CONTACT, TIER II INFORMATION CONTACT
Address: 1 VALERO WAY, E2A, SAN ANTONIO, TX, 78249
Phones: 24-Hour: 469-207-8063 Work Phone: 210-345-5401
Email: GE.SONG@VALERO.COM

Robert Staggs
Organization: VALERO TERMINALING AND DISTRIBUTION COMPANY
Title: MGR HEALTH, SAFETY & ENVIRONMENTAL - P&T
Contact Type(s): EMERGENCY CONTACT
Address: 9405 W PORT ARTHUR RD, BEAUMONT, TX, 77705
Phones: 24-Hour: 281-455-1268 Work Phone: 713-672-3339
Email: ROBERT.STAGGS@VALERO.COM

Harman Singh
Organization: VALERO TERMINALING AND DISTRIBUTION COMPANY
Title: MANAGER ENVIRONMENTAL
Contact Type(s): TIER II INFORMATION CONTACT
Address: 1 VALERO WAY, MS E2A, SAN ANTONIO, TX, 78249
Phones: 24-Hour: 832-331-2844 Work Phone: 210-345-5637
Email: HARMAN.SINGH@VALERO.COM

Jody Lambright
Organization: VALERO TERMINALING AND DISTRIBUTION COMPANY
Title: MANAGER AREA PIPELINES & TERMINALS

Facility Name: LUCAS STATION

Contact Type(s): EMERGENCY CONTACT, FAC. EMERGENCY COORDINATOR, OWNER / OPERATOR
Address: 9405 W PORT ARTHUR RD, BEAUMONT, TX, 77705
Phones: 24-Hour: 409-673-7612 Work Phone: 409-839-3518
Email: JODY.LAMBRIGHT@VALERO.COM

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **Corrosion Inhibitor CorrClean 173**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 12125-02-9, Component: AMMONIUM CHLORIDE, 2% Wt, Max Amt Code:
[ ] EHS, CAS: 1067-12-5, Component: PHOSPHINYLIDYNETRIMETHANOL, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 57-55-6, Component: PROPYLENE GLYCOL, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 68607-28-3, Component: QUATERNARY AMINE, 18% Wt, Max Amt Code:
[ ] EHS, CAS: 2767-80-8, Component: TRIS(HYDROXYMETHYL)PHOSPHINE, 15% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: 11,995 pounds Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: 5,998 pounds Average Daily Amount code: 05 (5,000 - 9,999 pounds)
Maximum amount in largest container: 11,995 pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 3
Amount: 11995 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **GASOLINE**
CAS #: null EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: null, Component: GASOLINE, 100% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 25,703 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 12,851 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 25,703 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Gasoline Tank
Amount: 25703 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **CRUDE OIL**
CAS #: 8002-05-9 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:

Facility Name: LUCAS STATION

[x] EHS, CAS: 7783-06-4, Component: HYDROGEN SULFIDE, 3% Wt, Max Amt Code: 13

[ ] EHS, CAS: 8002-05-9, Component: CRUDE OIL, 97% Wt, Max Amt Code: 13

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[x] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: 516,815,037 pounds — Maximum Amount code: 13 (10 MILLION + pounds)

Average Daily Amount: 258,407,518 pounds — Average Daily Amount code: 13 (10 MILLION + pounds)

Maximum amount in largest container: 107,950,920 pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 1958
Amount: 47498411 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2086
Amount: 107950920 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2088
Amount: 88789632 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2089
Amount: 88789632 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 2090

Amount: 88789632 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 1956
Amount: 47498405 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank 1957
Amount: 47498405 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **DIESEL FUEL**
CAS #: null EHS: NO

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: null, Component: DIESEL FUEL, 100% Wt, Max Amt Code: 07
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: 29,374 pounds Maximum Amount code: 07 (25,000 - 49,999 pounds)
Average Daily Amount: 14,687 pounds Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: 29,374 pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank

Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Control Room Generator
Amount: 3672 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Fire Pump Diesel Tank
Amount: 1836 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Maintenance Shop Generator
Amount: 3672 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Diesel Tank
Amount: 29374 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:
[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 70010
TCEQ Regulated Entity Number (RN): RN100210426
TCEQ Customer Number (CN): CN603665241
Facility was Purchased or First Time Reporting Hazardous Substances: NO
Effective Date: N/A
Facility was Sold, Closed or No Longer Stores Hazardous Substances: NO
Inactive Date: N/A

STATE / LOCAL FEES: $50

[x] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[x] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

Lucas Fire FINAL 1-18.pdf
Lucas Spill Final 1-18.pdf
Lucas Terminal site plan.pdf

Certification (Read and sign after completing all sections)
I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 6 and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Ge Song, Environmental Engineer
Name and official title of owner/operator
OR owner/operator's authorized representative

Ge Song
Signature

02/20/2024
Date Signed

Facility Name: PRAXAIR PORT ARTHUR PLANT

FACILITY IDENTIFICATION:

PRAXAIR PORT ARTHUR PLANT
Dept: N/A
Physical Address: 1801 S GULFWAY DR, PORT ARTHUR, TX 77640-4416
Mailing Address: PO BOX 210, NEDERLAND, TX 77627-0210
Geographic Location:
County: JEFFERSON
Latitude: 29.862777
Longitude: -93.977625
Fire Department: Port Arthur
LEPC: Jefferson LEPC

[ ] All facility information (not including chemical information) is identical to last year's submission

IDENTIFICATION NUMBERS:

Dun & Bradstreet: 197154586
NAICS: 325120 (Industrial Gas Manufacturing)

RMP: 1000046522 (RMP Facility ID)

Is the facility manned? [x] Manned [ ] Unmanned
Maximum No. of Occupants: 20

REGULATORY INFORMATION:

Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)? [x] Yes [ ] No
Subject to Chem. Accident Prevention under Section 112(r) of CAA (40 CFR part 68, Risk Mgmt. Pgm.)? [x] Yes [ ] No

CONTACT INFORMATION:

Andrew Esposito
Organization: LINDE INC.
Title: PRODUCTION MANAGER
Contact Type(s): OWNER / OPERATOR
Address: 10 RIVERVIEW DR, DANBURY, CT, 06810
Phones: 24-Hour: 409-781-7231 Work Phone: 409-984-7907
Email: ANDREW.ESPOSITO@LINDE.COM

Operator Onduty
Organization: PRAXAIR PIPELINE BUSINESS CENTER
Title:
Contact Type(s): EMERGENCY CONTACT
Address: 1585 SAWDUST RD STE 300, THE WOODLANDS, TX, 77380
Phones: 24-Hour: 800-926-9620 Work Phone: 281-203-3657
Email: ORESTES.PIMENIDES@LINDE.COM

Kurtis Kimmey
Organization: PRAXAIR SAFETY & ENVIRONMENTAL
Title: SAFETY SPECIALIST
Contact Type(s): BILLING CONTACT
Address: 4840 RAILROAD ST, DEER PARK, TX, 77536
Phones: 24-Hour: 936-689-2251
Email: KURTIS.KIMMEY@LINDE.COM

Arlis Drake

Facility Name: PRAXAIR PORT ARTHUR PLANT

Title: SAFETY MANAGER
Contact Type(s): TIER II INFORMATION CONTACT
Address: 2555 SAVANNAH AVE, PORT ARTHUR, TX, 77640
Phones: Emergency: 409-332-0956
Email: ARLIS.DRAKE@LINDE.COM

Andrew Esposito
Title: PLANT MANAGER
Contact Type(s): EMERGENCY CONTACT, FAC. EMERGENCY COORDINATOR
Address: 2555 SAVANNAH AVE, PORT ARTHUR, TX, 77640
Phones: 24-Hour: 409-781-7231 24-Hour: 409-984-7907
Email: ANDREW.ESPOSITO@LINDE.COM

Phillip Smith
Title: FACILITY SUPERINTENDENT
Contact Type(s): EMERGENCY CONTACT
Address: 2555 SAVANNAH AVE, PORT ARTHUR, TX, 77640
Phones: 24-Hour: 409-548-5762 Work Phone: 409-984-7906
Email: PHILLIP.SMITH@LINDE.COM

CHEMICAL DESCRIPTIONS:

CHEMICAL NAME: **PSA Adsorbent H-17**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 7631-86-9, Component: SILICON OXIDE (SIO2), 35% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 25% Wt, Max Amt Code:
[ ] EHS, CAS: 1305-78-8, Component: CALCIUM OXIDE, 20% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-59-3, Component: Sodium Oxide, 9% Wt, Max Amt Code:
[ ] EHS, CAS: 14808-60-7, Component: Quartz, 1% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds

Facility Name: PRAXAIR PORT ARTHUR PLANT

Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: West site of unit - Netgas area.
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PSA Adsorbent Vessels, east side of unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **HYDROGEN**
CAS #: 1333-74-0 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [ ] Liquid [x] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1333-74-0, Component: HYDROGEN, 100% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[x] Explosive
[x] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[ ] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

Facility Name: PRAXAIR PORT ARTHUR PLANT

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: Through out process plant equipment, vessels & piping

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **PSA Adsorbents H-16**

CAS #: UNKNOWN EHS:

[ ] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 7631-86-9, Component: SILICON OXIDE (SIO2), 50% Wt, Max Amt Code:

[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 30% Wt, Max Amt Code:

[ ] EHS, CAS: 1313-59-3, Component: Sodium Oxide, 13% Wt, Max Amt Code:

[ ] EHS, CAS: 12136-45-7, Component: POTASSIUM OXIDE, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 14808-60-7, Component: Quartz, 2% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 07 (25,000 - 49,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 07 (25,000 - 49,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: PSA Beds on west side of unti

Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PSA Adsorbent Vessels, east side of unit
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Lead Acid batteries (Sulfuric Acid)**
CAS #: 7664-93-9 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[x] EHS, CAS: 7664-93-9, Component: SULFURIC ACID, 40% Wt, Max Amt Code: 02
[ ] EHS, CAS: 7439-92-1, Component: LEAD, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 9003-07-0, Component: POLYPROPYLENE, 10% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[x] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 02 (100 - 499 pounds)
Average Daily Amount: N/A Average Daily Amount code: 02 (100 - 499 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Battery
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: MCC Building
Amount: 300 pounds

Facility Name: PRAXAIR PORT ARTHUR PLANT

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Denox**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1314-62-1, Component: Divandium Pentoxide, 4% Wt, Max Amt Code:
[ ] EHS, CAS: 1314-35-8, Component: Tungsten Trioxide, 8% Wt, Max Amt Code:
[ ] EHS, CAS: 13463-67-7, Component: TITANIUM DIOXIDE, 70% Wt, Max Amt Code:
[ ] EHS, CAS: 65997-17-3, Component: Vitreous Fibers, 10% Wt, Max Amt Code:
[ ] EHS, CAS: 7631-86-9, Component: Amorphous Silica, 8% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[x] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[x] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Tank Inside Building
Pressure: Less Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: SCR Unit located in convection section.
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Propylene Glycol (Intercool P-300)**
CAS #: 57-55-6 EHS:

Facility Name: PRAXAIR PORT ARTHUR PLANT

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 57-55-6, Component: 1,2 propanediol, 90% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: corrosion inhibitors and pH buffers, 5% Wt, Max Amt Code:
[ ] EHS, CAS: 7732-18-5, Component: deionized water, 3% Wt, Max Amt Code:
[ ] EHS, CAS: , Component: liquid dye, 2% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: H2 Compression Equipment and oil storage area.
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: West side of unit compressor area
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Sodium Hydroxide**
CAS #: UNKNOWN EHS:

[x] Identical to previous year

Facility Name: PRAXAIR PORT ARTHUR PLANT

[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 48% Wt, Max Amt Code: 04
[ ] EHS, CAS: 7732-18-5, Component: Water, 47% Wt, Max Amt Code:
[ ] EHS, CAS: 7647-14-5, Component: SODIUM CHLORIDE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[x] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 04 (1,000 - 4,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 04 (1,000 - 4,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Near boiler chemical building in chemical dyke.
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **OIL, [MOTOR]**
CAS #: 64742-65-0 EHS:

[ ] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 64742-65-0, Component: Oil (Motor), % Wt, Max Amt Code: 06
PHYSICAL HAZARDS:

Facility Name: PRAXAIR PORT ARTHUR PLANT

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Steel Drum
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Oil storage shed.
Amount: 4000 pounds

[ ] Confidential
Container Type: Other
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: A, B, C Compressor
Amount: 8000 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Netgas Compressors
Amount: 10500 pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **NITROGEN, REFRIGERATED LIQUID (CRYOGENIC LIQUID)**
CAS #: 7727-37-9 EHS: NO

[x] Identical to previous year
[ ] Trade Secret
[x] Pure [ ] Mixture
[ ] Solid [x] Liquid [x] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: NITROGEN, REFRIGERATED LIQUID (CRYOGENIC LIQUID), 100% Wt, Max Amt Code:

Facility Name: PRAXAIR PORT ARTHUR PLANT

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Cryogenic Conditions

Location: Nitrogen Storage Tanks T660 and T-670, behind cooling tower near roadway

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **SODIUM HYPOCHLORITE**

CAS #: 7681-52-9 EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1310-73-2, Component: SODIUM HYDROXIDE, 2% Wt, Max Amt Code:

[ ] EHS, CAS: 7681-52-9, Component: SODIUM HYPOCHLORITE, 15% Wt, Max Amt Code:

[ ] EHS, CAS: , Component: Water, 84% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[x] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

Facility Name: PRAXAIR PORT ARTHUR PLANT

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Cooling Tower Diked Area next to cooling tower
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **AQUA AMMONIA**
CAS #: 7664-41-7 EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1336-21-6, Component: Ammonia, 19% Wt, Max Amt Code: 06
[ ] EHS, CAS: , Component: Water, 81% Wt, Max Amt Code:
PHYSICAL HAZARDS:
[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:
[x] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 09 (75,000 - 99,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 09 (75,000 - 99,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Ambient Temperature
Location: Aqua Ammonia Storage Tank D-960, south side of unit near Aux boiler.
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **SULFURIC ACID**
CAS #: 7664-93-9 EHS: YES

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[x] EHS, CAS: 7664-93-9, Component: SULFURIC ACID (AQUEOUS), 93% Wt, Max Amt Code: 06
[ ] EHS, CAS: , Component: Water, 7% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[x] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[x] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: T-880C at Cooling Tower dike area

Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Tank inside dike area adjacent to boiler feed water building South end of plant.
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **TRANSFORMER OIL**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[ ] Solid [x] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 64742-46-7, Component: Petroleum Middle distillates, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 64742-53-6, Component: Petroleum light napthenic distillates, 50% Wt, Max Amt Code:
[ ] EHS, CAS: 128-37-0, Component: BUTYLATED HYDROXYTOLUENE, 0% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Electrical Transformer Yard near MCC, south side & MCC in unit.
Amount: 10500 pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Ambient Pressure Temp: Ambient Temperature
Location: Electrical Transformer area located next to the Netgas area switchgear
Amount: 15148 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 25-4Q and Katalco 23-4Q**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 65% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-99-1, Component: NICKEL MONOXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 12136-45-7, Component: DIPOTASSIUM OXIDE, 5% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Steam Methane Reformer Tubes located in SMR Box
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

Facility Name: PRAXAIR PORT ARTHUR PLANT

CHEMICAL NAME: **Katalco 41-6**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 1307-96-6, Component: Cobalt Oxide, 3% Wt, Max Amt Code:
[ ] EHS, CAS: 1313-27-5, Component: MOLYBDENUM(VI) OXIDE, 30% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 67% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[x] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 06 (10,000 - 24,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 06 (10,000 - 24,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Hydrotreater Vessel R-260, middle section of main pipe alley
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 32-5**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

Facility Name: PRAXAIR PORT ARTHUR PLANT

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1314-13-2, Component: ZINC OXIDE, 100% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds

Maximum Amount: N/A Maximum Amount code: 09 (75,000 - 99,999 pounds)

Average Daily Amount: N/A Average Daily Amount code: 09 (75,000 - 99,999 pounds)

Maximum amount in largest container: N/A pounds

No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential

Container Type: Above Ground Tank

Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature

Location: Desulfurizer Vessels R-270 A/B, middle section of main pipe alley

Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 71-5**

CAS #: UNKNOWN EHS:

[x] Identical to previous year

[ ] Trade Secret

[ ] Pure [x] Mixture

[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:

MIXTURE COMPONENTS:

[ ] EHS, CAS: 1308-38-9, Component: Chromium (III) Oxide, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 1317-38-0, Component: Copper Oxide, 5% Wt, Max Amt Code:

[ ] EHS, CAS: 1333-82-0, Component: CHROMIUM (6+) TRIOXIDE, 1% Wt, Max Amt Code:

[ ] EHS, CAS: 7440-44-0, Component: GRAPHITE (NATURAL), 4% Wt, Max Amt Code:

[ ] EHS, CAS: 1309-37-1, Component: IRON OXIDE RED, 85% Wt, Max Amt Code:

PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)

Facility Name: PRAXAIR PORT ARTHUR PLANT

[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[x] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[x] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:

[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 10 (100,000 - 499,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 10 (100,000 - 499,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: High Temperature Shift Converter R-310, east of Hydrogen Compression Skid
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by Texas

CHEMICAL NAME: **Katalco 92-1 Support Balls**
CAS #: UNKNOWN EHS:

[x] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: 14808-60-7, Component: SILICA, Quartz, 75% Wt, Max Amt Code:
[ ] EHS, CAS: 1344-28-1, Component: ALUMINUM OXIDE, 25% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[ ] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[ ] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[ ] Respiratory or skin sensitization
[ ] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

Facility Name: PRAXAIR PORT ARTHUR PLANT

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS
[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: Support balls in R-260, R-270A/B, and R-310
Amount: N/A pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

CHEMICAL NAME: **PSA Adsorbent H-2-13 and H-2-12**
CAS #: UNKNOWN EHS:

[ ] Identical to previous year
[ ] Trade Secret
[ ] Pure [x] Mixture
[x] Solid [ ] Liquid [ ] Gas

MIXTURE COMPONENTS:
MIXTURE COMPONENTS:
[ ] EHS, CAS: , Component: ACTIVATED CARBON, 100% Wt, Max Amt Code:
PHYSICAL HAZARDS:

[ ] Combustible Dust
[ ] Explosive
[ ] Gas under pressure (compressed gas)
[ ] Organic peroxide
[ ] Pyrophoric Gas
[ ] Self-heating
[ ] Corrosive to metal
[x] Flammable (gases, aerosols, liquids, or solids)
[ ] In contact with water emits flammable gas
[ ] Oxidizer (liquid, solid or gas)
[ ] Pyrophoric (liquid or solid)
[ ] Self-reactive

HEALTH HAZARDS:

[ ] Acute toxicity (any route of exposure)
[ ] Carcinogenicity
[ ] Reproductive toxicity
[x] Serious eye damage or eye irritation
[x] Skin corrosion or irritation
[ ] Aspiration hazard
[ ] Germ cell mutagenicity
[x] Respiratory or skin sensitization
[x] Simple Asphyxiant
[ ] Specific target organ toxicity(single or repeated exposure)

[ ] Hazard not otherwise classified.

INVENTORY:
[ ] Below Reporting Thresholds
Maximum Amount: N/A Maximum Amount code: 08 (50,000 - 74,999 pounds)
Average Daily Amount: N/A Average Daily Amount code: 08 (50,000 - 74,999 pounds)
Maximum amount in largest container: N/A pounds
No. days on-site: 365

STORAGE LOCATIONS

Facility Name: PRAXAIR PORT ARTHUR PLANT

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PSA Adsorbent Vessels, east side of unit
Amount: N/A pounds

[ ] Confidential
Container Type: Above Ground Tank
Pressure: Greater Than Ambient Pressure Temp: Greater Than Ambient Temperature
Location: PSA absorbent beds West Side of unit.
Amount: 1000 pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by Texas

FACILITY STATE FIELDS:

Texas requests the following:
[ ] Initial [ ] Updated [x] Annual
TXT2 Number: 38096
TCEQ Regulated Entity Number (RN): RN106078850
TCEQ Customer Number (CN): CN600130645
Facility was Purchased or First Time Reporting Hazardous Substances: NO
Effective Date: N/A
Facility was Sold, Closed or No Longer Stores Hazardous Substances: NO
Inactive Date: N/A

STATE / LOCAL FEES: $100

[x] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

ATTACHMENTS

2024 PORT ARTHUR TX - VALERO SPCC PLOT PLAN UPDATE NOV 2023 (002).pdf

Certification (Read and sign after completing all sections)
I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 19
and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Arlis Drake, S&ES		01/09/2024
Name and official title of owner/operator OR owner/operator's authorized representative	Signature	Date Signed

SAFETY DATA SHEET

Section 1. Identification

Product name : BLEACH 12.5%

Product code : PFR2835

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Cleaner.

Print date : 3/28/2023

Validation date : 3/28/2023

Version : 2

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : CORROSIVE TO METALS - Category 1
SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : May be corrosive to metals.
Causes severe skin burns and eye damage.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves, protective clothing and eye or face protection. Keep only in original packaging. Avoid release to the environment. Wash thoroughly after handling.

Section 2. Hazards identification

Response : Collect spillage. Absorb spillage to prevent material damage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage : Store locked up. Store in a corrosion resistant container with a resistant inner liner.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Sodium hypochlorite	10 - 20	7681-52-9
Sodium hydroxide	1 - 5	1310-73-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.

Inhalation : Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash affected area with soap and mild detergent for at least 20 - 60 minutes. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Call a poison center or physician. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : No specific data.

Skin contact : pain or irritation,redness,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : halogenated compounds,metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store in a corrosion resistant container with a resistant inner liner. Store locked up. Separate from acids. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Sodium hypochlorite Sodium hydroxide	**OARS WEEL (United States, 1/2021).** STEL: 2 mg/m³ 15 minutes. **ACGIH TLV (United States, 4/2014).** C: 2 mg/m³, 0 times per shift, 0 hours. **NIOSH REL (United States, 10/2013).** CEIL: 2 mg/m³, 0 times per shift, 0 hours. **OSHA PEL (United States, 2/2013).** TWA: 2 mg/m³, 0 times per shift, 8 hours. **OSHA PEL 1989 (United States, 3/1989).** CEIL: 2 mg/m³, 0 times per shift, 0 hours.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection : Chemical-resistant gloves.

Skin protection : Wear long sleeves and chemical resistant apron to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Clear.]

Color : Yellow.

Odor : Chlorine-like.

Odor threshold : Not available.

pH : 12 to 13

: Neat - without dilution.

Melting point/freezing point : -20°C (-4°F)

Initial Boiling Point : Not available.

Section 9. Physical and chemical properties

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Not available.

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : 2.3 kPa (17.5 mm Hg) @ 20°C

Relative vapor density : >1 [Air = 1]

Relative density : 1.2 (15.6°C)

Density : 10 (lbs/gal)

Solubility in water : Soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, reducing materials, metals, acids and moisture.
Any acid material, ammonia, urea, oxidizable materials, and metals, such as nickel, copper, tin, aluminum, and iron.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium hypochlorite	LD50 Dermal	Rat	>3000 mg/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Sodium hypochlorite	-	3	-

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : No specific data.

Skin contact : pain or irritation,redness,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Section 11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Sodium hypochlorite	Not available.	2500	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Sodium hypochlorite	Acute EC50 46000 µg/l Marine water	Algae - Gracilaria tenuistipitata	4 days
	Acute LC50 56400 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 32 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 32 µg/l Marine water	Fish - Oncorhynchus kisutch - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 10000 µg/l Marine water	Algae - Gracilaria tenuistipitata	4 days
	Chronic NOEC 0.1 ppm Fresh water	Fish - Cyprinus carpio - Young	30 days
Sodium hydroxide	Acute EC50 40.38 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 125 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1791	UN1791	UN1791	UN1791
UN proper shipping name	HYPOCHLORITE SOLUTION (Contains: Sodium hypochlorite)	HYPOCHLORITE SOLUTION (Contains: Sodium hypochlorite)	HYPOCHLORITE SOLUTION (Contains: Sodium hypochlorite)	HYPOCHLORITE SOLUTION (Contains: Sodium hypochlorite)
Transport hazard class(es)	8 	8 	8 	8 
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

DOT Classification : This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. **Reportable quantity** 790.51 lbs / 358.89 kg [79.008 gal / 299.08 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark).
The marine pollutant mark is not required when transported by road or rail.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-A S-B

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Sodium hypochlorite, 79 gal of this product.
Sodium hydroxide, 9524 gal of this product.

Marine pollutant Sodium hypochlorite

North-America NAERG : 154

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: sodium hypochlorite, solution; sodium hydroxide

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : CORROSIVE TO METALS - Category 1
SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1

SARA 313

Supplier notification : No products were found.

California Prop. 65

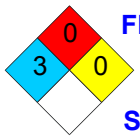
This product does not require a Safe Harbor warning under California Prop. 65.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



Flammability
Health
Instability
Special

History

Date of printing : 3/28/2023

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

Section 16. Other information

N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET

Section 1. Identification

Product name : BPC 67335 COMPLETE TREATMENT

Product code : BPC67335

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Scale and Corrosion inhibitor

Print date : 12/30/2022

Validation date : 12/30/2022

Version : 2.01

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Causes severe skin burns and eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves: > 8 hours (breakthrough time): Nitrile or Neoprene gloves.. Wear protective clothing. Wear eye or face protection. Avoid release to the environment. Wash thoroughly after handling.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

Section 2. Hazards identification

CENTER or doctor.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Phosphonocarboxylic acid salt	1 - 5	Trade secret.
Modified arylamine	1 - 5	Trade secret.
Sodium Molybdate	1 - 5	7631-95-0
Sodium hydroxide	1 - 5	1310-73-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Additional information

Any concentration shown as a range is to protect confidentiality.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.

Inhalation : Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash affected area with soap and mild detergent for at least 20 - 60 minutes. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Call a poison center or physician. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : No specific data.

Skin contact : pain or irritation,redness,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Additional information

If product is ingested and vomiting occurs naturally, have person lean forward to reduce the risk of aspiration into the lungs.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,nitrogen oxides,phosphorus oxides,metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Phosphonocarboxylic acid salt	None.
Modified arylamine	None.
Sodium Molybdate	**ACGIH TLV (United States, 1/2022). Notes: as Mo** TWA: 0.5 mg/m³, (as Mo), 0 times per shift, 8 hours. Form: Respirable fraction **OSHA PEL 1989 (United States, 3/1989). Notes: as Mo** TWA: 5 mg/m³, (as Mo), 0 times per shift, 8 hours. Form: Soluble **OSHA PEL (United States, 5/2018). Notes: as Mo** TWA: 5 mg/m³, (as Mo), 0 times per shift, 8 hours.
Sodium hydroxide	**ACGIH TLV (United States, 4/2014).** C: 2 mg/m³, 0 times per shift, 0 hours. **NIOSH REL (United States, 10/2013).** CEIL: 2 mg/m³, 0 times per shift, 0 hours. **OSHA PEL (United States, 2/2013).** TWA: 2 mg/m³, 0 times per shift, 8 hours. **OSHA PEL 1989 (United States, 3/1989).** CEIL: 2 mg/m³, 0 times per shift, 0 hours.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection : Chemical-resistant gloves: Nitrile or Neoprene gloves.

Skin protection : Wear long sleeves and chemical resistant apron to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Clear.]

Color : Amber.

Odor : Sweet. [Slight]

Odor threshold : Not available.

pH : 13.3

: Neat-without dilution.

Melting point/freezing point : Not available.

Initial Boiling Point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Closed cup: >93.4°C (>200.1°F) [TCC]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : >1 [Air = 1]

Relative density : 1.1264 (15.6°C)

Density : 9.38 (lbs/gal)

Solubility in water : Soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic (15.6°C): 4.5 cP

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, acids and moisture.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Modified arylamine	LD50 Oral	Rat	640 mg/kg	-
Sodium Molybdate	LD50 Oral	Rat	0.25 g/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

No available toxicity data.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : No specific data.

Section 11. Toxicological information

Skin contact : pain or irritation,redness,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
BPC 67335 COMPLETE TREATMENT	23188.6	Not available.	Not available.	Not available.	Not available.
Modified arylamine	640	Not available.	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
BPC 67335 COMPLETE TREATMENT	Acute EC50 1886 ppm	Daphnia - Daphnia pulex	48 hours
	Acute EC50 3186.4 mg/l	Daphnia	48 hours
	Acute EC50 2873.8 mg/l	Daphnia	48 hours
	Acute LC50 3504.2 mg/l	Fish	96 hours
Sodium Molybdate	Acute EC50 40.19 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute LC50 2847.5 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 79800 µg/l Marine water	Fish - Morone saxatilis	96 hours
	Chronic NOEC 50 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 87.8 mg/l Fresh water	Fish - Oncorhynchus clarkii - Embryo	30 days
Sodium hydroxide	Acute EC50 40.38 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 125 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

Section 12. Ecological information

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Additional information

An EcoTox™ Report, and/or the material's environmental fate is available upon request at the following number: 1-800-235-4249, then press 4.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN3266	UN3266	UN3266	UN3266
UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N. O.S. (Contains: Sodium hydroxide, Modified arylamine)	CORROSIVE LIQUID, BASIC, INORGANIC, N. O.S. (Contains: Sodium hydroxide, Modified arylamine)	CORROSIVE LIQUID, BASIC, INORGANIC, N. O.S. (Contains: Sodium hydroxide, Modified arylamine)	CORROSIVE LIQUID, BASIC, INORGANIC, N. O.S. (Contains: Sodium hydroxide, Modified arylamine)
Transport hazard class(es)	8 	8 	8 	8 
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8).

IMDG : **Emergency schedules** F-A S-B

Section 14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Sodium hydroxide, 5626 gal of this product.

Marine pollutant Not available.

North-America NAERG : 154

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: sodium hydroxide

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1

SARA 313

Supplier notification : No products were found.

California Prop. 65

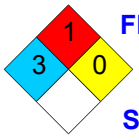
This product does not require a Safe Harbor warning under California Prop. 65.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



History

Date of printing : 12/30/2022

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET

Section 1. Identification

Product name : BPW 76091 BLENDED COAGULANT

Product code : BPW76091

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Water clarifier.

Print date : 6/13/2023

Validation date : 1/4/2023

Version : 3.01

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : CORROSIVE TO METALS - Category 1
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : May be corrosive to metals.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements

Prevention : Wear protective gloves: > 8 hours (breakthrough time): Nitrile or Neoprene gloves.. Wear eye or face protection. Keep only in original packaging. Wash thoroughly after handling.

Response : Absorb spillage to prevent material damage. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Store in a corrosion resistant container with a resistant inner liner.

Section 2. Hazards identification

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Aluminum salt	20 - 30	Trade secret.
Alkylamine polymer	20 - 30	Trade secret.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:,pain or irritation,watering,redness

Inhalation : No specific data.

Skin contact : irritation,redness

Ingestion : No specific data.

Section 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,nitrogen oxides,halogenated compounds,metal oxide/ oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store in a corrosion resistant container with a resistant inner liner. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Aluminum salt	**NIOSH REL (United States, 6/2009). Notes: as Al** TWA: 2 mg/m³, (as Al), 0 times per shift, 10 hours. **OSHA PEL 1989 (United States, 3/1989). Notes: as Al** TWA: 2 mg/m³, (as Al), 0 times per shift, 8 hours.
Alkylamine polymer	None.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Section 8. Exposure controls/personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves: Nitrile or Neoprene gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Color : Amber.

Odor : Amine like. [Slight]

Odor threshold : Not available.

pH : 3 to 4.5

: Neat - without dilution.

Melting point/freezing point : -12°C (10.4°F)

Initial Boiling Point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Closed cup: >93.4°C (>200.1°F) [Unknown]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : >1 [Air = 1]

Relative density : 1.24 (25°C)

Density : 10.32 (lbs/gal)

Solubility in water : Soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic (15°C): 230 cP

VOC : Not available.

Pour Point : Not available.

Section 9. Physical and chemical properties

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Aluminum salt	LD50 Oral	Rat	681 mg/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

No available toxicity data.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:,pain or irritation,watering,redness

Inhalation : No specific data.

Skin contact : irritation,redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
BPW 76091 BLENDED COAGULANT	2724	Not available.	Not available.	Not available.	Not available.
Aluminum salt	681	Not available.	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Aluminum salt	Acute EC50 91.44 ul/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1760	UN1760	UN1760	UN1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Contains: Aluminum salt, Alkylamine polymer)	CORROSIVE LIQUID, N.O.S. (Contains: Aluminum salt, Alkylamine polymer)	CORROSIVE LIQUID, N.O.S. (Contains: Aluminum salt, Alkylamine polymer)	CORROSIVE LIQUID, N.O.S. (Contains: Aluminum salt, Alkylamine polymer)
Transport hazard class(es)	8 	8 	8 	8 
Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8).

Section 14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Not applicable.

Marine pollutant Not available.

North-America NAERG : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : CORROSIVE TO METALS - Category 1
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A

SARA 313

Supplier notification : No products were found.

California Prop. 65

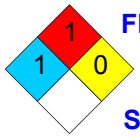
This product does not require a Safe Harbor warning under California Prop. 65.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



Flammability
Health
Instability
Special

History

Date of printing : 6/13/2023

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

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This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET

Section 1. Identification

Product name : BPW 76910 ANTIFOAM

Product code : BPW76910

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Antifoam.

Print date : 4/6/2023

Validation date : 1/4/2023

Version : 4.01

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of causing cancer.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Section 2. Hazards identification

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves: > 8 hours (breakthrough time): Nitrile or Neoprene gloves.. Wear protective clothing. Wear eye or face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.

Response : Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage : Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazards not otherwise classified : Prolonged or repeated contact may dry skin and cause irritation.

Additional information

May be harmful if ingested. This product may be aspirated into the lungs during swallowing or vomiting of swallowed material. Aspiration into the lungs may produce chemical pneumonitis, pulmonary edema, and hemorrhaging. Repeated or prolonged contact may cause dermatitis (inflammation) and defatting of the skin (dryness).

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Paraffinic petroleum distillate	60 - 70	64742-55-8
Petroleum distillates	60 - 70	64742-53-6
A polyether	20 - 30	Trade secret.
Kerosene (petroleum)	20 - 30	8008-20-6
Ethoxylated octylphenol	1 - 5	Trade secret.
Fatty acid	1 - 5	57-11-4
Naphthalene	0.1 - 1	91-20-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.

Section 4. First aid measures

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash affected area with soap and mild detergent for at least 20 - 60 minutes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : respiratory tract irritation,coughing,nausea or vomiting,headache,drowsiness/fatigue, dizziness/vertigo,unconsciousness

Skin contact : pain or irritation,redness,dryness,cracking,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Additional information

If product is ingested and vomiting occurs naturally, have person lean forward to reduce the risk of aspiration into the lungs.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Paraffinic petroleum distillate	**ACGIH TLV (United States, 1/2022).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **ACGIH TLV (United States).** TWA: 5 mg/m³ Form: Inhalable fraction. **NIOSH REL (United States, 10/2020).** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours.
Petroleum distillates	**ACGIH TLV (United States, 1/2022).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **ACGIH TLV (United States).** TWA: 5 mg/m³ Form: Inhalable fraction. **OSHA PEL (United States).** TWA: 5 mg/m³ Form: Inhalable fraction. **NIOSH REL (United States, 10/2020).** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours.
A polyether	**OARS WEEL (United States, 1/2021).** TWA: 10 mg/m³ 8 hours.
Kerosene (petroleum)	**ACGIH TLV (United States, 1/2022). Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor), 0 times per shift, 8 hours. **NIOSH REL (United States, 10/2020).** TWA: 100 mg/m³, 0 times per shift, 10 hours.
Ethoxylated octylphenol	None.

Section 8. Exposure controls/personal protection

Fatty acid	**ACGIH TLV (United States, 1/2022).** TWA: 10 mg/m³ 8 hours. Form: Inhalable fraction TWA: 3 mg/m³ 8 hours. Form: Respirable fraction
Naphthalene	**ACGIH TLV (United States, 1/2022). Absorbed through skin.** TWA: 52 mg/m³, 0 times per shift, 8 hours. TWA: 10 ppm, 0 times per shift, 8 hours. **NIOSH REL (United States, 10/2020).** STEL: 75 mg/m³, 0 times per shift, 15 minutes. STEL: 15 ppm, 0 times per shift, 15 minutes. TWA: 50 mg/m³, 0 times per shift, 10 hours. TWA: 10 ppm, 0 times per shift, 10 hours. **OSHA PEL (United States, 5/2018).** TWA: 50 mg/m³, 0 times per shift, 8 hours. TWA: 10 ppm, 0 times per shift, 8 hours. **OSHA PEL 1989 (United States, 3/1989).** STEL: 75 mg/m³, 0 times per shift, 15 minutes. STEL: 15 ppm, 0 times per shift, 15 minutes. TWA: 50 mg/m³, 0 times per shift, 8 hours. TWA: 10 ppm, 0 times per shift, 8 hours.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection : Chemical-resistant gloves: Nitrile or Neoprene gloves.

Skin protection : Wear long sleeves and chemical resistant apron to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Clear to hazy.]

Color : Yellow. [Light]

Odor : Aromatic hydrocarbon. [Slight]

Section 9. Physical and chemical properties

Odor threshold : Not available.

pH : 4.3 to 5.3 [Conc. (% w/w): 1%]

: 5% of product in 75% isopropanol / 25% water solution

Melting point/freezing point : <0°C (<32°F)

Initial Boiling Point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Closed cup: >93.9°C (>201°F) [SFCC]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : 0.12 kPa (0.89 mm Hg) @ 21.1°C (Calculated Value for all Components.)

Relative vapor density : >1 [Air = 1]

Relative density : 0.8928 (15.6°C)

Density : 7.44 (lbs/gal)

Solubility in water : Insoluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic (15.6°C): 34 cP

VOC : Not available.

Pour Point : -15°C (5°F)

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: organic materials and alkalis. Slightly reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Paraffinic petroleum distillate	LC50 Inhalation Dusts and mists	Rat	3900 mg/m³	4 hours
Petroleum distillates	LC50 Inhalation Dusts and mists	Rat	2180 mg/m³	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
A polyether	LD50 Dermal	Rabbit	20000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>15000 mg/kg	-
Kerosene (petroleum)	LC50 Inhalation Dusts and mists	Rat	>5.68 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	>6.03 mg/l	4 hours
	LD50 Dermal	Rabbit	>4000 mg/kg	-
	LD50 Oral	Rat	15 g/kg	-
	LD50 Oral	Rat	>20000 mg/kg	-
Ethoxylated octylphenol	LD50 Oral	Mouse	3500 mg/kg	-
	LD50 Oral	Rat	4190 mg/kg	-
Fatty acid	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	4600 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Petroleum distillates	-	3	-
Kerosene (petroleum)	-	3	-
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Kerosene (petroleum)	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Section 11. Toxicological information

Name	Result
Paraffinic petroleum distillate	ASPIRATION HAZARD - Category 1
Petroleum distillates	ASPIRATION HAZARD - Category 1
Kerosene (petroleum)	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : respiratory tract irritation,coughing,nausea or vomiting,headache,drowsiness/fatigue, dizziness/vertigo,unconsciousness

Skin contact : pain or irritation,redness,dryness,cracking,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
BPW 76910 ANTIFOAM	24641.5	Not available.	Not available.	Not available.	Not available.
Petroleum distillates	Not available.	2500	Not available.	Not available.	Not available.
A polyether	2500	20000	Not available.	Not available.	Not available.
Kerosene (petroleum)	15000	2500	Not available.	Not available.	Not available.
Ethoxylated octylphenol	500	Not available.	Not available.	Not available.	Not available.
Fatty acid	4600	Not available.	Not available.	Not available.	Not available.
Naphthalene	500	Not available.	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
BPW 76910 ANTIFOAM	Acute LC50 4.76 mg/l	Daphnia	48 hours
	Acute LC50 0.43 mg/l	Daphnia	48 hours
	Acute LC50 268.2 mg/l	Fish	96 hours
A polyether	Acute LC50 650000 µg/l Marine water	Fish - Menidia beryllina	96 hours
Kerosene (petroleum)	Acute EC50 >5000 mg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 2216 mg/l Marine water	Crustaceans - Arcatia tonsa	48 hours
	Acute LC50 >1000 mg/l Marine water	Fish - Cyprinodon variegatus	96 hours
Ethoxylated octylphenol	Acute EC50 210 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - Pandalus montagui - Adult	48 hours
	Acute LC50 8600 to 9800 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Naphthalene	EC50 2.96 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	EC50 2.16 mg/l Fresh water	Daphnia	48 hours
	LC50 1.6 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
A polyether	-0.68 to 0.01	-	low
Kerosene (petroleum)	3.23 to 4.57	-	low
Fatty acid	8.23	238 to 288	low
Naphthalene	3.4	36.5 to 168	low

Section 12. Ecological information

Mobility in soil

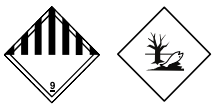
Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: Kerosene (petroleum))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: Kerosene (petroleum))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: Kerosene (petroleum))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains: Kerosene (petroleum))
Transport hazard class(es)	9 	9 	9 	9 
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.

Additional information

DOT Classification : Non-bulk packages of this product are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg.
Reportable quantity 31548.7 lbs / 14323.1 kg [4238.1 gal / 16042.9 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
Remarks This material is Not Regulated if transported in a package that does not meet or exceed the Reportable Quantity (RQ).

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).
Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.

IMDG : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IATA : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Section 14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Naphthalene, 4240 gal of this product.

Marine pollutant Kerosene (petroleum)
Ethoxylated octylphenol

North-America NAERG : 171

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: naphthalene; toluene

Clean Water Act (CWA) 311: naphthalene; toluene

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Naphthalene	Naphthalene	0.1 - 1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Toluene	Toluene	0 - 0.1

SARA 302/304 : No products were found.

SARA 311/312

Classification : SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
HNOC - Defatting irritant

SARA 313

	Product name	CAS number	%
Supplier notification	Naphthalene	91-20-3	0.1 - 1

California Prop. 65

⚠ **WARNING**: This product can expose you to chemicals including naphthalene, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)

History

Date of printing : 4/6/2023

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET
CORTROL* IS1050

1. Identification

Product identifier	**CORTROL IS1050**
Other means of identification	None.
Recommended use	Oxygen scavenger
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.

Label elements

Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification. The material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard's (29CFR 1910.1200) implementation of the Globally Harmonized System (GHS), i.e., material is not a dangerous substance or mixture requiring GHS classification.

Precautionary statement

Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

Composition comments	Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Get medical attention if irritation develops and persists. Flush immediately with plenty of running water.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid prolonged exposure. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Cobalt sulphate (CAS 10124-43-3)	TWA	0.02 mg/m3	Inhalable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other	Wear suitable protective clothing.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Powder
Physical state	Solid.
Form	Solid.
Color	white to tan
Odor	Odorless
Odor threshold	Not available.
pH (concentrated product)	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 199 °F (> 93 °C) SETA(CC)
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 0.1 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	10 (5% Solution)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.

Hazardous decomposition products	Oxides of sulphur evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Prolonged or repeated contact may cause irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
CORTROL IS1050		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Inhalation		
LC50	Rat	> 5.5 mg/l, 4 Hours (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	2720 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Cobalt sulphate (CAS 10124-43-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	424 mg/kg

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

ACGIH sensitization

Cobalt sulphate (CAS 10124-43-3)	Dermal sensitization Respiratory sensitization

Respiratory sensitization	Not a respiratory sensitizer. This product is not expected to cause respiratory sensitization.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Cobalt sulphate (CAS 10124-43-3)	Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.

Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Based on available data, the classification criteria are not met. Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	203 mg/L, 48 hour
	NOEL	Daphnia magna	32 mg/L, 48 hour
Fish	LC50	Rainbow Trout	58 mg/L, 96 hour
	NOEL	Rainbow Trout	32 mg/L, 96 hour

Persistence and degradability

- COD (mgO2/g)	109
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Cobalt sulphate (CAS 10124-43-3) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Cobalt sulphate (CAS 10124-43-3)
Nickel sulphate (CAS 7786-81-4)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration ALL ingredients in this product are authorized in 21CFR173.310 for use as boiler water additives where the steam may contact food.

NSF Registered and/or meets USDA (according to 1998 guidelines):
Registration No. – 141474
Category Code(s):
G5 Cooling and retort water treatment products
G6 Boiler treatment products, steam line products – food contact

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Cobalt sulphate (CAS 10124-43-3)

California Proposition 65

WARNING: WARNING: This product can expose you to chemicals including Nickel sulphate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Cobalt sulphate (CAS 10124-43-3)	Listed: May 20, 2005
Nickel sulphate (CAS 7786-81-4)	Listed: May 7, 2004

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Nickel sulphate (CAS 7786-81-4)	Listed: October 26, 2018

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Nickel sulphate (CAS 7786-81-4)	Listed: October 26, 2018

16. Other information, including date of preparation or last revision

Issue date Nov-19-2014

Revision date Feb-11-2023

Version # 1.2

NFPA ratings Health: 0
Flammability: 0
Instability: 0

NFPA ratings

List of abbreviations	DOT: Department of Transportation (49 CFR 172.101). GHS: Globally Harmonized System of Classification and Labeling of Chemicals. IARC: International Agency for Research on Cancer. OSHA: Occupational Safety & Health Administration. WHMIS: Workplace Hazardous Materials Information System. CAS: Chemical Abstract Service Registration Number ACGIH: American Conference of Governmental Industrial Hygienists TWA: Time Weighted Average STEL: Short Term Exposure Limit LD50: Lethal Dose, 50% LC50: Lethal Concentration, 50% NOEL: No Observed Effect Level COD: Chemical Oxygen Demand BOD: Biochemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

SAFETY DATA SHEET
CORTROL* OS5700

1. Identification

Product identifier **CORTROL OS5700**

Other means of identification None.

Recommended use Water based dissolved oxygen scavenger/ metal passivator.

Recommended restrictions None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid breathing mist/vapor. Wear eye protection/face protection. Wear protective gloves.

Response If on skin: Wash with plenty of water/. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Call a poison center/doctor if you feel unwell.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
HYDROXYPROPYL HYDROXYLAMINE	97173-34-7	20 - 40
N,N Diethylhydroxylamine	3710-84-7	2.5 - 10

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers / tanks with water spray. Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapor. Do not touch or walk through spilled material. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground. Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
N,N Diethylhydroxylamine (CAS 3710-84-7)	TWA	2 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide adequate ventilation. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other Wear appropriate chemical resistant clothing.

Respiratory protection A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid

Physical state Liquid.

Form Liquid.

Color Colorless to yellow

Odor Mild

Odor threshold Not available.

pH (concentrated product) 9.8 Neat

Melting point/freezing point 14 °F (-10 °C)

Initial boiling point and boiling range 212 °F (100 °C)

Flash point > 201 °F (> 94 °C) P-M(CC)

Evaporation rate Slower than Ether

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 18 mmHg

Vapor pressure temp. 70 °F (21 °C)

Vapor density > 1

Relative density 1.03

Relative density temperature 70 °F (21 °C)

Solubility(ies)

Solubility (water) 100 %

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity 3 mPa.s

Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	9.4 (5% Solution)
Pour point	19 °F (-7 °C)
VOC	29 % CALCULATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. None under normal conditions.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
N,N Diethylhydroxylamine (CAS 3710-84-7)		
Acute		
Dermal		
LD50	Rabbit	1300 mg/kg
Inhalation		
Vapor		
LC50	Rat	9.5 mg/l, 4 h
Oral		
LD50	Rat	2190 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	This product is not expected to cause respiratory sensitization.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	69 mg/L, 48 hour (Estimated)
Fish	LC50	Fathead Minnow	200 mg/L, 96 hour (Estimated)
	NOEL	Fathead Minnow	110 mg/L, 96 hour (Estimated)

Persistence and degradability

- COD (mgO2/g)	771 (calculated data)
- BOD 5 (mgO2/g)	16 (calculated data)
- BOD 28 (mgO2/g)	202 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	31 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days)	9 (calculated data)
- TOC (mg C/g)	182 (calculated data)
Bioaccumulative potential	
Mobility in soil	Not available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated "active".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration All ingredients in this product are authorized in 21 CFR176.170 for use in boilers where the steam will be used for manufacturing paper or paperboard.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Dec-16-2014

Revision date Apr-26-2024

Version # 4.2

NFPA ratings Health: 2
Flammability: 0
Instability: 0

NFPA ratings

List of abbreviations

CAS: Chemical Abstract Service Registration Number
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
ACGIH: American Conference of Governmental Industrial Hygienists
NOEL: No Observed Effect Level
STEL: Short Term Exposure Limit
LC50: Lethal Concentration, 50%
TWA: Time Weighted Average
BOD: Biochemical Oxygen Demand
COD: Chemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
LD50: Lethal Dose, 50%
DOT: Department of Transportation (49 CFR 172.101).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer.
OSHA: Occupational Safety & Health Administration.
WHMIS: Workplace Hazardous Materials Information System.

References:

No data available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information

Exposure controls/personal protection: Appropriate engineering controls
Exposure controls/personal protection: Respiratory protection
Toxicological information: Aspiration hazard
Toxicological information: Germ cell mutagenicity
Toxicological information: Reproductive toxicity
Ecological information: Persistence and degradability
Ecological information: Mobility in soil
Ecological information: Other adverse effects
Regulatory information: Toxic Substances Control Act (TSCA)

Prepared by

This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

* Trademark of Veolia. May be registered in one or more countries.

Kingscote CHEMICALS

Safety Data Sheet

Issue Date: 04-Oct-2013 **Revision Date:** 06-Feb-2017 **Version Number:** 1.1

1. Identification

Product Identifiers
Product Name: Bright Dyes® FLT Yellow/Green Liquid

Product Number: 106001

Recommended Use & Restrictions on Use
Water tracing & leak detection dye

Manufacturer/Supplier
Kingscote Chemicals, Inc.
3334 South Tech Blvd.
Miamisburg, OH 45342
U.S.A.

Emergency Telephone Number
Company Telephone Number: (937) 886-9100
Emergency Telephone (24 hr): INFOTRAC (800) 535-5053 (North America)
+1-352-323-3500 (International)

2. Hazards Identification

Classification
This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. Composition/Information on Ingredients

This product is not hazardous according to OSHA 29 CFR 1910.1200. Components not listed are not hazardous or are below reportable limits.

4. First-Aid Measures

First-Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash thoroughly with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. If breathing is difficult, administer oxygen; seek medical attention immediately.

Ingestion Rinse mouth. DO NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention if large quantities were ingested or if nausea occurs.

Most Important Symptoms and Effects

Symptoms Will cause staining of the skin on contact. May cause eye irritation. Inhalation of dust may cause respiratory irritation. Ingestion may cause urine to be a yellow/green color until the dye has been washed through the system.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician Treat symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media
Water spray (fog). Carbon dioxide (CO2). Dry chemical. Regular foam.

Unsuitable Extinguishing Media
Not determined

Specific Hazards Arising from the Chemical
Product is not flammable. Burning/combustion may produce oxides of carbon and nitrogen (NOx).

Protective Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment as recommended in Section 8.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12 and Section 13.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Sweep up and collect into suitable containers for disposal. Flush area with water.

7. Handling and Storage

Precautions for Safe Handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practices. Use personal protection recommended in Section 8. Avoid contact with skin, eyes, or clothing. Avoid breathing dusts. Contaminated clothing should be thoroughly washed before reuse.

Conditions for Safe Storage, Including Incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry, and well-ventilated area. Keep from freezing.
Incompatible Materials	Acids.

8. Exposure Controls / Personal Protection

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Controls
Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual Protection Measures, Such as Personal Protective Equipment:

Eye/Face Protection	Goggles.
Skin & Body Protection	Rubber gloves. Suitable protective clothing.
Respiratory Protection	No protection is ordinarily required under normal conditions of use.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practices.

9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical State	Liquid	**Odor**	None apparent
Appearance	Yellow/green liquid	**Odor Threshold**	Not determined
Color	Yellow/green		

Property	**Values**
pH	>8.0
Melting/Freezing Point	~32° F
Boiling Point/Range	~212° F
Flash Point	Not applicable
Evaporation Rate	1.8
Flammability (solid, gas)	Liquid – not applicable
Upper Flammability Limits	Not applicable
Lower Flammability Limits	Not applicable
Vapor Pressure	Not applicable
Vapor Density	0.6
Relative Density	Not applicable
Specific Gravity	Not determined
Solubility	Highly soluble in water
Partition Coefficient	Not determined
Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

10. Stability and Reactivity

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep separated from incompatible substances. Keep out of reach of children.

Incompatible Materials
Acids. Strong oxidizing agents.

Hazardous Decomposition Products
Oxides of carbon and nitrogen (NOx).

11: Toxicological Information

Information on Likely Routes of Exposure

Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not ingest.
Skin Contact	May cause an allergic skin reaction.
Eye Contact	Avoid contact with eyes.

Delayed, Immediate, and Chronic Effects from Short- and Long-Term Exposure
May cause an allergic skin reaction.

Numerical Measures of Toxicity
Not determined

Symptoms Associated with Exposure
See Section 4 of this SDS for symptoms.

Carcinogenicity

NTP	None
IARC	None
OSHA	None

12. Ecological Information

Ecotoxicity
This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information
Not available

Persistence/Degradability
Not determined

Bioaccumulation
Not determined

Mobility
Not determined

Other Adverse Effects
Not determined

13. Disposal Considerations

Waste Disposal Methods
Dispose of in accordance with federal, state, and local regulations.

Contaminated Packaging
Do not re-use empty containers. Dispose of containers in accordance with federal, state, and local regulations.

14. Transport Information

Note
See current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.

DOT	Not regulated
IATA	Not regulated
OMDG	Not regulated

15: Regulatory Information

International Inventories

TASCA	This product is not subject to TSCA 12(b) reporting requirements.

U.S. Federal Regulations

CERCLA	This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund

Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CWA (Clean Water Act) This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

U.S. State Regulations

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know This product does not contain any substances regulated under applicable state right-to-know regulations.

16: Other Information

HMIS

Health Hazards	Flammability	Instability	Special Hazards
1	0	0	Not determined

NFPA

Health Hazards	Flammability	Physical Hazards	Personal Protection
1	0	0	B

Issue Date 04-Oct-2013

Revision Date 06-Feb-2017

Revision Note Content Review

Disclaimer

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End of Safety Data Sheet

Kingscote CHEMICALS

Safety Data Sheet

Issue Date: 27-Sep-2013 **Revision Date:** 06-Feb-2017 **Version Number:** 1.1

1. Identification

Product Identifiers
Product Name: Bright Dyes® Standard Blue Liquid

Product Number: 106002

Recommended Use & Restrictions on Use
Water tracing & leak detection dye

Manufacturer/Supplier
Kingscote Chemicals, Inc.
3334 South Tech Blvd.
Miamisburg, OH 45342
U.S.A.

Emergency Telephone Number
Company Telephone Number: (937) 886-9100
Emergency Telephone (24 hr): INFOTRAC (800) 535-5053 (North America)
+1-352-323-3500 (International)

2. Hazards Identification

Classification
This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. Composition/Information on Ingredients

This product is not hazardous according to OSHA 29 CFR 1910.1200. Components not listed are not hazardous or are below reportable limits.

4. First-Aid Measures

First-Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash thoroughly with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. If breathing is difficult, administer oxygen; seek medical attention immediately.

Ingestion Rinse mouth. DO NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention if large quantities were ingested or if nausea occurs.

Most Important Symptoms and Effects

Symptoms Will cause staining of the skin on contact. May cause eye irritation. Inhalation of dust may cause respiratory irritation. Ingestion may cause urine to be a purple color until the dye has been washed through the system.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician Treat symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media
Water spray (fog). Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media
Not determined

Specific Hazards Arising from the Chemical
Product is not flammable. Burning/combustion may produce oxides of carbon and nitrogen (NOx).

Protective Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment as recommended in Section 8.

Environmental Precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12 and Section 13.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Sweep up and collect into suitable containers for disposal. Flush area with water.

7. Handling and Storage

Precautions for Safe Handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practices. Use personal protection recommended in Section 8. Avoid contact with skin, eyes, or clothing. Avoid breathing dusts. Contaminated clothing should not be allowed out of the workplace.

Conditions for Safe Storage, Including Incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry, and well-ventilated area. Keep from freezing.
Incompatible Materials	Acids.

8. Exposure Controls / Personal Protection

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Controls
Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual Protection Measures, Such as Personal Protective Equipment:

Eye/Face Protection	Goggles.
Skin & Body Protection	Rubber gloves. Suitable protective clothing.
Respiratory Protection	No protection is ordinarily required under normal conditions of use.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practices.

9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical State	Liquid	**Odor**	None apparent
Appearance	Dark blue liquid	**Odor Threshold**	Not determined
Color	Blue		

Property	**Values**
pH	5.1 – 5.3
Melting/Freezing Point	~32° F
Boiling Point/Range	~212° F
Flash Point	Not applicable
Evaporation Rate	Not applicable
Flammability (solid, gas)	Liquid – not applicable
Upper Flammability Limits	Not applicable
Lower Flammability Limits	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative Density	Not applicable
Specific Gravity	1.02
Solubility	Highly soluble in water
Partition Coefficient	Not determined
Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

10. Stability and Reactivity

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep separated from incompatible substances. Keep out of reach of children.

Incompatible Materials
Acids.

Hazardous Decomposition Products
Oxides of carbon and nitrogen (NOx).

11: Toxicological Information

Information on Likely Routes of Exposure

Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not ingest.
Skin Contact	May cause an allergic skin reaction.
Eye Contact	Avoid contact with eyes.

Delayed, Immediate, and Chronic Effects from Short- and Long-Term Exposure
May cause an allergic skin reaction.

Numerical Measures of Toxicity
Not determined

Symptoms Associated with Exposure
See Section 4 of this SDS for symptoms.

Carcinogenicity

NTP	None
IARC	None
OSHA	None

12. Ecological Information

Ecotoxicity
This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information
Not available

Persistence/Degradability
Not determined

Bioaccumulation
Not determined

Mobility
Not determined

Other Adverse Effects
Not determined

13. Disposal Considerations

Waste Disposal Methods
Dispose of in accordance with federal, state, and local regulations.

Contaminated Packaging
Do not re-use empty containers. Dispose of containers in accordance with federal, state, and local regulations.

14. Transport Information

Note
See current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.

DOT	Not regulated
IATA	Not regulated
OMDG	Not regulated

15: Regulatory Information

International Inventories

TSCA	Listed

U.S. Federal Regulations

CERCLA	This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CWA (Clean Water Act) This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

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California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know This product does not contain any substances regulated under applicable state right-to-know regulations.

16: Other Information

HMIS

Health Hazards	Flammability	Instability	Special Hazards
1	0	0	Not determined

NFPA

Health Hazards	Flammability	Physical Hazards	Personal Protection
1	0	0	B

Issue Date 27-Sep-2013

Revision Date 06-Feb-2017

Revision Note Content Review

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End of Safety Data Sheet

Safety Data Sheet
DCI-4A

1. Product and company identification

Product name : DCI-4A

Material uses : Petrochemical industry: Petrochemicals. Fuel additive. Corrosion inhibitor.

Internal code : 10151

System code : 10151

Supplier : Innospec Fuel Specialties LLC
8310 South Valley Highway
Suite 350
Englewood
CO, 80112
USA

Information contact : 1-800-441-9547

e-mail address of person responsible for this SDS : sdsinfo@innospecinc.com

NON-emergency enquiries : corporatecommunications@innospecinc.com

Emergency telephone number

In USA, Canada and North America, 24 hour / 7 day emergency information for our product is provided by the CHEMTREC® Emergency Call Center based in the USA

Country information	:	Emergency telephone number
USA, Canada, Puerto Rico, Virgin Islands	:	+1 800 424 9300
In case of difficulties, or for ships at sea	:	+1 703 527 3887

In Europe, Middle East, Africa, Asia Pacific and South America 24 hour / 7 day emergency response for our products is provided by the NCEC CARECHEM 24 global network

The main regional centres are listed here in Section 1.
Other local contact numbers for specific language support in Asia Pacific are listed in Section 16

Country information	:	Emergency telephone number	Location
South America (all countries)	:	+1 215 207 0061	Philadelphia USA
Brazil	:	+55 11 3197 5891	Brazil
Mexico	:	+52 555 004 8763	Mexico
Europe (all countries) Middle East, Africa (French, Portuguese, English)	:	+44 (0) 1235 239 670	London, UK
Middle East, Africa (Arabic, French, English)	:	+44 (0) 1235 239 671	Lebanon
Asia Pacific (all countries except China)	:	+65 3158 1074	Singapore
China	:	+86 10 5100 3039	Beijing China

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2B
CARCINOGENICITY - Category 2

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H226 - Flammable liquid and vapor.
H315 + H320 - Causes skin and eye irritation.
H351 - Suspected of causing cancer.

Precautionary statements

Prevention : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves: > 8 hours (breakthrough time): Viton®; 1 - 4 hours (breakthrough time): nitrile rubber. Wear eye or face protection: Recommended: splash goggles. Wear protective clothing.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P233 - Keep container tightly closed.
P264 - Wash hands thoroughly after handling.

Response : P308 + P313 - IF exposed or concerned: Get medical attention.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.
P332 + P313 - If skin irritation occurs: Get medical attention.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.

Storage : P405 - Store locked up.
P403 - Store in a well-ventilated place.
P235 - Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Target organs : Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, liver, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), ears, eye, lens or cornea.

Section 2. Hazards identification

See toxicological information (Section 11)

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Xylene	15 - 30	1330-20-7
ethylbenzene	4.99 - 9.99	100-41-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Additional information

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Remove dentures if any. Wash out mouth with water. Stop if the exposed person feels sick as vomiting may be dangerous. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Section 4. First aid measures

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Flash point : Closed cup: >34°C (>93.2°F) [ASTM D93 (B)]

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Section 6. Accidental release measures

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Xylene	**ACGIH TLV (United States, 3/2017).** TWA: 100 ppm, 0 times per shift, 8 hours. TWA: 434 mg/m³, 0 times per shift, 8 hours. STEL: 150 ppm, 0 times per shift, 15 minutes. STEL: 651 mg/m³, 0 times per shift, 15 minutes. **OSHA PEL 1989 (United States, 3/1989).** TWA: 100 ppm, 0 times per shift, 8 hours. TWA: 435 mg/m³, 0 times per shift, 8 hours. STEL: 150 ppm, 0 times per shift, 15 minutes. STEL: 655 mg/m³, 0 times per shift, 15 minutes. **OSHA PEL (United States, 6/2016).** TWA: 100 ppm, 0 times per shift, 8 hours. TWA: 435 mg/m³, 0 times per shift, 8 hours.
ethylbenzene	**ACGIH TLV (United States, 3/2017).** TWA: 20 ppm, 0 times per shift, 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 100 ppm, 0 times per shift, 8 hours. TWA: 435 mg/m³, 0 times per shift, 8 hours. STEL: 125 ppm, 0 times per shift, 15 minutes. STEL: 545 mg/m³, 0 times per shift, 15 minutes. **NIOSH REL (United States, 10/2016).** TWA: 100 ppm, 0 times per shift, 10 hours. TWA: 435 mg/m³, 0 times per shift, 10 hours. STEL: 125 ppm, 0 times per shift, 15 minutes. STEL: 545 mg/m³, 0 times per shift, 15 minutes. **OSHA PEL (United States, 6/2016).** TWA: 100 ppm, 0 times per shift, 8 hours. TWA: 435 mg/m³, 0 times per shift, 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: splash goggles

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Viton®
1 - 4 hours (breakthrough time): nitrile rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapor filter (Type A)

Personal protective equipment (Pictograms) :

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Clear.]

Color : Brown. [Dark]

Odor : Aromatic.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Lowest known value: 136.05°C (276.9°F) (ethylbenzene). Weighted average: 192.3°C (378.1°F)

Flash point : Closed cup: >34°C (>93.2°F) [ASTM D93 (B)]

Evaporation rate : Highest known value: 0.84 (ethylbenzene) Weighted average: 0.78compared with butyl acetate

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Greatest known range: Lower: 1% Upper: 7% (xylene)

Section 9. Physical and chemical properties

Vapor pressure : Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.26 kPa (1.95 mm Hg) (at 20°C)

Vapor density : Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)

Density : 0.95 g/cm³ [15°C (59°F)]

Specific gravity : 0.952

Solubility : Insoluble in the following materials: cold water, hot water.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Lowest known value: 431.85 to 459.85°C (809.3 to 859.7°F) (ethylbenzene).

Decomposition temperature : Not available.

Viscosity : Kinematic (room temperature): 1.62 cm^2/s (162 cSt)
Kinematic (40°C (104°F)): 0.56 cm^2/s (56 cSt)

Pour point : <-39°C

Aerosol product

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Species	Result	Dose	
Xylene	-	Rabbit	LD50 Dermal	4320 mg/kg	-
	-	Rat	LD50 Oral	4300 mg/kg	-
ethylbenzene	-	Mouse	LC50 Inhalation Vapor	35500 mg/m³	2 hours
	-	Rabbit	LC50 Inhalation Vapor	4000 ppm	4 hours
	-	Rabbit	LD50 Dermal	>5000 mg/kg	-
DCI-4A	-	Rat	LD50 Oral	>16000 mg/kg	-

Potential chronic health effects

Not available.

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Test	Species	Result
Xylene	-	Rabbit	Eyes - Severe irritant -
	-	Rat	Skin - Mild irritant -
	-	Rabbit	Skin - Moderate irritant -
ethylbenzene	-	Rabbit	Eyes - Severe irritant -
	-	Rabbit	Skin - Mild irritant -

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Xylene	-	3	-
ethylbenzene	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Xylene	ASPIRATION HAZARD - Category 1

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Xylene	Acute LC50 3.3 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 7.2 mg/l	Algae	48 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
	Chronic NOEC <1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 6800 µg/l Fresh water	Daphnia - Daphnia magna	48 hours

Section 12. Ecological information

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene	-	-	Readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Xylene	3.12 to 3.2	8.1 to 25.9	low
ethylbenzene	3.1	-	low

Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1307	UN1307	UN1307
UN proper shipping name	Xylenes solution RQ (xylene, ethylbenzene)	XYLENES solution	Xylenes solution
Transport hazard class(es)	3 	3 	3 
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Additional information	**Reportable quantity** 500 lbs / 227 kg [63.123 gal / 238.95 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	**Emergency schedules (EmS)** F-E, S-D **Special provisions** 223	**Passenger and Cargo Aircraft** Quantity limitation: 60 L Packaging instructions: 355 **Cargo Aircraft Only** Quantity limitation: 220 L Packaging instructions: 366 **Limited Quantities - Passenger Aircraft** Quantity limitation: 10 L

Section 14. Transport information

	Limited quantity Yes. **Packaging instruction** **Passenger aircraft** Quantity limitation: 60 L **Cargo aircraft** Quantity limitation: 220 L **Special provisions** B1, IB3, T2, TP1		Packaging instructions: Y344 **Special provisions** A3

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
Clean Water Act (CWA) 307: ethylbenzene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Xylene ethylbenzene	15 - 30 4.99 - 9.99	Yes. Yes.	No. No.	No. No.	Yes. Yes.	No. Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	xylene ethylbenzene	1330-20-7 100-41-4	15 - 30 4.99 - 9.99
Supplier notification	xylene ethylbenzene	1330-20-7 100-41-4	15 - 30 4.99 - 9.99

Section 15. Regulatory information

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: XYLENE; DIMETHYLBENZENE

New York : The following components are listed: Xylene mixed

New Jersey : The following components are listed: XYLENES; BENZENE, DIMETHYL-

Pennsylvania : The following components are listed: BENZENE, DIMETHYL-

California Prop. 65 : **WARNING:** This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level	Contains : % or ppm
ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.	4.99 - 9.99

International lists

National inventory

Australia inventory (AICS) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

China inventory (IECSC) : All components are listed or exempted.

Europe inventory : All components are listed or exempted.

Japan inventory (ENCS) : **Japan inventory (ENCS)**: All components are listed or exempted.
Japan inventory (ISHL): Not determined.

New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.

Philippines inventory (PICCS) : All components are listed or exempted.

Korea inventory (KECI) : All components are listed or exempted.

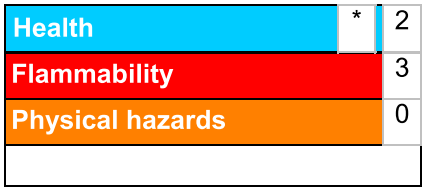
Taiwan inventory (TCSI) : All components are listed or exempted.

United States inventory (TSCA 8b) : All components are listed or exempted.

Our REACH (pre-) registrations DO NOT cover the following:
1. The manufacture of these products by our company outside the EU unless covered by the Only Representative provisions, and
2. The importation of these products into Europe by other companies. Re-importation by other companies is not covered by our (pre-) registrations
Customers and other third parties importing and/or re-importing our products into Europe will need either:
- Their own (pre-) registration for substances contained in the imported product, or constituent monomers (imported above 1 tonne per year and >2% by weight) in the case of imported polymers, or
- In the case of importation only, to make use of the "Only Representative" provisions, if available.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing : 2018-03-05

Date of issue/Date of revision : 2018-03-05

Date of previous issue : 2018-03-05

Version : 3.09

Key to abbreviations :
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

VEOLIA

SAFETY DATA SHEET
DEPOSITROL* SF5109

1. Identification

Product identifier	**DEPOSITROL SF5109**
Other means of identification	None.
Recommended use	Deposit control agent
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	

Label elements

Signal word	Warning
Hazard statement	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Precautionary statement	
Prevention	Avoid breathing mist or vapor. Wear eye/face protection. Use only outdoors or in a well-ventilated area. Wear protective gloves. Wash thoroughly after handling.
Response	IF ON SKIN: Wash with plenty of soap and water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Alcohols,C12-C15,ethoxylated propoxylated	68551-13-3	10 - 20

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Do not freeze. If frozen, thaw and mix completely prior to use.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Splash proof chemical goggles.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Glove selection must take into account any solvents and other hazards present. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Not available.
Color	Colorless
Odor	Slight
Odor threshold	Not available.
pH (concentrated product)	12.8
Melting point/freezing point	33 °F (1 °C)
Initial boiling point and boiling range	220 °F (104 °C)
Flash point	> 213 °F (> 101 °C) P-M(CC)
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1 (Air = 1)
Relative density	1.01
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	21 cps

Viscosity temperature	70 °F (21 °C)
Other information	
pH in aqueous solution	11.3 (5% SOL.)
Pour point	38 °F (3 °C)
VOC	0 % (Estimated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur. Contact with water reactive compounds may cause fire or explosion.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Oxides of carbon evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

Components	Species	Test Results
Alcohols,C12-C15,ethoxylated propoxylated (CAS 68551-13-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 2000 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	This product is not expected to cause respiratory sensitization.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.

Aspiration hazard Based on available data, the classification criteria are not met.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	13 mg/L, 48 hour (Estimated)
Fish	LC50	Fathead Minnow	4 mg/L, 96 hour (Estimated)

Persistence and degradability

- **COD (mgO2/g)** 460 (calculated data)
- **BOD 5 (mgO2/g)** 43 (calculated data)
- **BOD 28 (mgO2/g)** 64 (calculated data)
- **TOC (mg C/g)** 108 (calculated data)

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories	Skin corrosion or irritation Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

1,4-DIOXANE (CAS 123-91-1)
Ethylene oxide (oxirane) (CAS 75-21-8)
Propylene oxide (CAS 75-56-9)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Ethylene oxide (oxirane) (CAS 75-21-8)
Propylene oxide (CAS 75-56-9)

Safe Drinking Water Act (SDWA)	Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

NSF Registered and/or meets USDA (according to 1998 guidelines):	Registration No. – 144577 Category Code(s): G5 Cooling and retort water treatment products G7 Boiler, steam line treatment products – nonfood contact

US state regulations

California Proposition 65

WARNING: WARNING: This product can expose you to chemicals including Ethylene oxide (oxirane), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-DIOXANE (CAS 123-91-1)	Listed: January 1, 1988
Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: July 1, 1987
Propylene oxide (CAS 75-56-9)	Listed: October 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: August 7, 2009

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: August 7, 2009

16. Other information, including date of preparation or last revision

Issue date	Feb-04-2015
Revision date	Feb-19-2023
Version #	3.1
NFPA ratings	Health: 2 Flammability: 0 Instability: 0
NFPA ratings	

List of abbreviations	CAS: Chemical Abstract Service Registration Number NFPA: National Fire Protection Association ACGIH: American Conference of Governmental Industrial Hygienists LD50: Lethal Dose, 50% LC50: Lethal Concentration, 50% DOT: Department of Transportation (49 CFR 172.101). IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code GHS: Globally Harmonized System of Classification and Labeling of Chemicals. OSHA: Occupational Safety & Health Administration.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.
Revision information	Exposure controls/personal protection: Appropriate engineering controls Exposure controls/personal protection: Respiratory protection Other information, including date of preparation or last revision: Prepared by
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

* Trademark of Veolia. May be registered in one or more countries.

VEOLIA

SAFETY DATA SHEET
FLOGARD* MS6206

1. Identification

Product identifier **FLOGARD MS6206**

Other means of identification None.

Recommended use Corrosion inhibitor

Recommended restrictions Industrial use only.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B

OSHA defined hazards Not classified.

Label elements

Signal word Warning

Hazard statement May be corrosive to metals. Causes skin irritation. Causes eye irritation.

Precautionary statement

Prevention Keep only in original container. Wash thoroughly after handling. Wear protective gloves.

Response If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Absorb spillage to prevent material-damage. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take off contaminated clothing and wash it before reuse.

Storage Store in corrosive resistant container with a resistant inner liner.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Tetrapotassium pyrophosphate	7320-34-5	2.5 - 10

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. See Section 8 of the SDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in tightly closed container. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation.

8. Exposure controls/personal protection

Occupational exposure limits	This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation. Provide eyewash station and safety shower. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Colorless
Odor	Odorless
Odor threshold	Not available.
pH (concentrated product)	8.8 Neat
Melting point/freezing point	< -0.04 °F (< -18 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	> 199 °F (> 93 °C) P-M(CC)
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.53
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	12 mPa.s
Viscosity temperature	70 °F (21 °C)

Other information

Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	7.8 (5% Solution)
Pour point	< 5 °F (< -15 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	May be corrosive to metals.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials. None under normal conditions.
Incompatible materials	Strong oxidizing agents. Metals.
Hazardous decomposition products	Oxides of phosphorus evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Causes skin irritation.
Eye contact	Causes eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
FLOGARD MS6206		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Estimated value)
Oral		
LD50	Rat	> 5000 mg/kg (Estimated value)

Components	Species	Test Results
Tetrapotassium pyrophosphate (CAS 7320-34-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	2440 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	This product is not expected to cause respiratory sensitization.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	1275 mg/L, 48 hour
		Mysid Shrimp	724 mg/L, 48 hour
	NOEL	Daphnia magna	500 mg/L, 48 hour
		Mysid Shrimp	155 mg/L, 48 hour
Fish	LC50	Fathead Minnow	1740 mg/L, 96 hour
		Rainbow Trout	> 1000 mg/L, 96 hour (Estimated)
	NOEL	Fathead Minnow	1000 mg/L, 96 hour

Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3266
UN proper shipping name	Corrosive liquid, basic, inorganic, n.o.s. (TETRA POTASSIUM PYROPHOSPHATE)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	154

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN3266
UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Tetrapotassium pyrophosphate)
Transport hazard class(es)	
Class	8

Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	154
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN3266
UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Tetrapotassium pyrophosphate)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated “active”.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes

Classified hazard categories	Corrosive to metal Skin corrosion or irritation Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration	21 CFR 176.170 (components of paper and paperboard in contact with aqueous and fatty foods)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Oct-10-2014
Revision date	Feb-12-2023
Version #	3.2
NFPA ratings	Health: 2 Flammability: 0 Instability: 0
NFPA ratings	

List of abbreviations	DOT: Department of Transportation (49 CFR 172.101). GHS: Globally Harmonized System of Classification and Labeling of Chemicals. IARC: International Agency for Research on Cancer. OSHA: Occupational Safety & Health Administration. WHMIS: Workplace Hazardous Materials Information System. CAS: Chemical Abstract Service Registration Number ACGIH: American Conference of Governmental Industrial Hygienists NOEL: No Observed Effect Level STEL: Short Term Exposure Limit LC50: Lethal Concentration, 50% LD50: Lethal Dose, 50% TWA: Time Weighted Average BOD: Biochemical Oxygen Demand COD: Chemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code NFPA: National Fire Protection Association TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Other information, including date of preparation or last revision: Prepared by Other information, including date of preparation or last revision: Disclaimer
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

VEOLIA

SAFETY DATA SHEET
FLOGARD* MS6210

1. Identification

Product identifier	**FLOGARD MS6210**
Other means of identification	None.
Recommended use	Water-based corrosion inhibitor
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	May be corrosive to metals. Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention	Keep only in original container. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves.
Response	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Absorb spillage to prevent material damage.
Storage	Store locked up. Store in corrosive resistant container with a resistant inner liner. Store in a well-ventilated place. Keep container tightly closed.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Phosphoric Acid	7664-38-2	10 - 20
Zinc bis(dihydrogen phosphate)	13598-37-3	10 - 20
Zinc sulphate	7733-02-0	2.5 - 10

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. Keep victim warm.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not get this material in contact with eyes. Do not taste or swallow. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in original tightly closed container. Keep only in the original container. Protect from freezing. If frozen, thaw and mix completely prior to use. Store locked up.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Phosphoric Acid (CAS 7664-38-2)	PEL	1 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Phosphoric Acid (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Phosphoric Acid (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Eye wash fountain and emergency showers are recommended. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other

Wear appropriate chemical resistant clothing. Wash off after each use. Replace as necessary.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Colorless
Odor	None
Odor threshold	Not available.
pH (concentrated product)	1
Melting point/freezing point	5 °F (-15 °C)
Initial boiling point and boiling range	220 °F (104 °C)
Flash point	> 200 °F (> 93 °C) P-M(CC)
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	17 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1 (Air = 1)
Relative density	1.35
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	18 cps
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	2.1 (5% SOL.)
Pour point	10 °F (-12 °C)
VOC	0 % (Calculated)

10. Stability and reactivity

Reactivity	May be corrosive to metals.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Contact with strong bases may cause a violent reaction releasing heat.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Metals. Strong oxidizing agents. Incompatible with bases.
Hazardous decomposition products	Oxides of sulfur. Oxides of phosphorus.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye damage.

Ingestion Harmful if swallowed. Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Product	Species	Test Results
FLOGARD MS6210		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	1833 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Phosphoric Acid (CAS 7664-38-2)		
Acute		
Dermal		
LD50	Rabbit	2740 mg/kg
Oral		
LD50	Rat	300 mg/kg
Zinc bis(dihydrogen phosphate) (CAS 13598-37-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	1260 mg/kg
Zinc sulphate (CAS 7733-02-0)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	1710 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Based on available data, the classification criteria are not met.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	3.8 mg/L, 48 hour
	NOEL	Daphnia magna	3.2 mg/L, 48 hour
Fish	LC50	Fathead Minnow	16 mg/L, 96 hour (Estimated)
		Rainbow Trout	21.3 mg/L, 96 hour
	NOEL	Fathead Minnow	6.3 mg/L, 96 hour (Estimated)
		Rainbow Trout	15.5 mg/L, 96 hour

Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] D006: Waste Cadmium The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3264
UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, ZINC SULFATE), RQ
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Special precautions for user	Not available.
ERG number	154

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN3264
UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, ZINC SULFATE)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	Yes
ERG Code	154
Special precautions for user	Not available.

IMDG

UN number	UN3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid, ZINC SULFATE), RQ(ZINC SULFATE, Phosphoric acid), MARINE POLLUTANT
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-B
Special precautions for user	Not available.

DOT

IATA; IMDG

Marine pollutant

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Phosphoric Acid (CAS 7664-38-2)	Listed.
Zinc bis(dihydrogen phosphate) (CAS 13598-37-3)	Listed.
Zinc sulphate (CAS 7733-02-0)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Corrosive to metal
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Zinc bis(dihydrogen phosphate)	13598-37-3	10 - 20
Zinc sulphate	7733-02-0	2.5 - 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Cadmium (CAS 7440-43-9)
LEAD (CAS 7439-92-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Phosphoric Acid (CAS 7664-38-2)

California Proposition 65

WARNING: WARNING: This product can expose you to chemicals including Cadmium, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Cadmium (CAS 7440-43-9)	Listed: October 1, 1987
LEAD (CAS 7439-92-1)	Listed: October 1, 1992

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Cadmium (CAS 7440-43-9)	Listed: May 1, 1997
LEAD (CAS 7439-92-1)	Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

LEAD (CAS 7439-92-1)	Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Cadmium (CAS 7440-43-9)	Listed: May 1, 1997
LEAD (CAS 7439-92-1)	Listed: February 27, 1987

16. Other information, including date of preparation or last revision

Issue date Nov-17-2014
Revision date Feb-17-2023
Version # 5.1

NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	
List of abbreviations	CAS: Chemical Abstract Service Registration Number ACGIH: American Conference of Governmental Industrial Hygienists NOEL: No Observed Effect Level STEL: Short Term Exposure Limit LC50: Lethal Concentration, 50% TWA: Time Weighted Average BOD: Biochemical Oxygen Demand COD: Chemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code LD50: Lethal Dose, 50% TSRN indicates a Trade Secret Registry Number is used in place of the CAS number. NFPA: National Fire Protection Association
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

VEOLIA

SAFETY DATA SHEET
FOAMTROL* AF1440

1. Identification

Product identifier **FOAMTROL AF1440**

Other means of identification None.

Recommended use Antifoam

Recommended restrictions None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1B
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Aspiration hazard	Category 1

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves. Wear eye protection/face protection.

Response IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Distillates(petroleum), hydrotreated middle	64742-46-7	60 - 80
Fatty acid ethoxylate	61791-00-2	2.5 - 10
Fatty acids, C16-18	67701-03-5	2.5 - 10

Composition comments	Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Carbon dioxide, dry chemicals, foam, water spray (fog).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers / tanks with water spray.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch or walk through spilled material. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store away from oxidizers. Store in original tightly closed container. Store between 32 - 38 °C. If storage is below 32 °C, warm and mix prior to use to ensure homogeneity. Store in accordance with local/regional/national/international regulation.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Distillates(petroleum), hydrotreated middle (CAS 64742-46-7)	PEL	5 mg/m3	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Distillates(petroleum), hydrotreated middle (CAS 64742-46-7)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Distillates(petroleum), hydrotreated middle (CAS 64742-46-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide adequate ventilation. Eye wash fountain and emergency showers are recommended. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Face shield is recommended.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid

Physical state Liquid.

Form Liquid.

Color Amber

Odor Hydrocarbon

Odor threshold Not available.

pH (concentrated product) Not available.

Melting point/freezing point	18 °F (-8 °C)
Initial boiling point and boiling range	350 °F (177 °C)
Flash point	> 200 °F (> 93 °C) P-M(CC)
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 1 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	> 1 (Air = 1)
Relative density	0.87
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	0 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	11 cps
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	5.6 (5% EMULSION)
Pour point	< 60 °F (< 16 °C)
VOC	53.9 % (Estimated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Oxides of carbon evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	May cause irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	May be fatal if swallowed and enters airways.

Product	Species	Test Results
FOAMTROL AF1440		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg (Calculated according to GHS additivity formula)
Inhalation		
LC50	Rat	> 5 mg/l, 4 Hours (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Distillates(petroleum), hydrotreated middle (CAS 64742-46-7)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	4.6 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Fatty acids, C16-18 (CAS 67701-03-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Not classified.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Distillates(petroleum), hydrotreated middle (CAS 64742-46-7)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	720 mg/L, 48 hour
	NOEL	Daphnia magna	250 mg/L, 48 hour
Fish	LC50	Rainbow Trout	353 mg/L, 96 hour
	NOEL	Rainbow Trout	250 mg/L, 96 hour

Persistence and degradability

- COD (mgO2/g)	1486 (calculated data)
- BOD 5 (mgO2/g)	138 (calculated data)
- BOD 28 (mgO2/g)	285 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	13 (calculated data)
- TOC (mg C/g)	500 (calculated data)

Bioaccumulative potential

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

1,4-DIOXANE (CAS 123-91-1)
Ethylene oxide (oxirane) (CAS 75-21-8)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Ethylene oxide (oxirane) (CAS 75-21-8)

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration 21 CFR 176.210 (defoaming agents used in the manufacture of paper and paperboard)

NSF Registered and/or meets USDA (according to 1998 guidelines):
Registration No. – 148167
Category Code(s):
G5 Cooling and retort water treatment products
G7 Boiler, steam line treatment products – nonfood contact

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Distillates(petroleum), hydrotreated middle (CAS 64742-46-7)

California Proposition 65

WARNING: WARNING: This product can expose you to chemicals including Ethylene oxide (oxirane), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-DIOXANE (CAS 123-91-1)	Listed: January 1, 1988
Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: July 1, 1987

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: August 7, 2009

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Ethylene oxide (oxirane) (CAS 75-21-8)	Listed: August 7, 2009

16. Other information, including date of preparation or last revision

Issue date Nov-14-2014

Revision date Feb-12-2023

Version # 4.1

NFPA ratings Health: 2
Flammability: 0
Instability: 0

NFPA ratings

List of abbreviations

CAS: Chemical Abstract Service Registration Number
ACGIH: American Conference of Governmental Industrial Hygienists
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

References:

No data available

Disclaimer

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Revision information

This document has undergone significant changes and should be reviewed in its entirety.

Prepared by

This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

SAFETY DATA SHEET
FOAMTROL* AF2211

1. Identification

Product identifier **FOAMTROL AF2211**

Other means of identification None.

Recommended use Antifoam

Recommended restrictions None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification. The material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard's (29CFR 1910.1200) implementation of the Globally Harmonized System (GHS), i.e., material is not a dangerous substance or mixture requiring GHS classification.

Precautionary statement

Prevention Wash thoroughly after handling.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container to approved local facility.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Rinse skin with water/shower.
Eye contact	Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers / tanks with water spray.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Use care in handling/storage.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation.

8. Exposure controls/personal protection

Occupational exposure limits	This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear suitable protective clothing.

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Colorless
Odor	Slight
Odor threshold	Not available.
pH (concentrated product)	Not available.
Melting point/freezing point	-17 °F (-27 °C)
Initial boiling point and boiling range	> 392 °F (> 200 °C)
Flash point	318 °F (159 °C) P-M(CC)
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 1 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	> 1
Relative density	0.98
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	400 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	7 (5% Emulsion)
Pour point	-11 °F (-24 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Stable under normal storage conditions. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Incompatible materials	Strong oxidizing agents.

Hazardous decomposition products Oxides of carbon evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation No adverse effects due to inhalation are expected.

Skin contact Prolonged or repeated contact may cause irritation.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion May cause gastrointestinal irritation.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
FOAMTROL AF2211		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg (Calculated according to GHS additivity formula)

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Not classified.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not classified.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	544 mg/L, 48 hour
	NOEL	Daphnia magna	313 mg/L, 48 hour
Fish	LC50	Rainbow Trout	2620 mg/L, 96 hour
	NOEL	Rainbow Trout	1250 mg/L, 96 hour

Persistence and degradability

- **COD (mgO2/g)** 2130
- **BOD 5 (mgO2/g)** 1

Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration This product may be used as a defoaming agent in the manufacture of uncoated paper and paperboard at levels not exceeding 0.1% by weight of dry pulp.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Dec-15-2014

Revision date Feb-18-2023

Version # 3.1

NFPA ratings Health: 0
Flammability: 0
Instability: 0

NFPA ratings

List of abbreviations

CAS: Chemical Abstract Service Registration Number
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
ACGIH: American Conference of Governmental Industrial Hygienists
NOEL: No Observed Effect Level
STEL: Short Term Exposure Limit
LC50: Lethal Concentration, 50%
LD50: Lethal Dose, 50%
TWA: Time Weighted Average
BOD: Biochemical Oxygen Demand
COD: Chemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
NFPA: National Fire Protection Association
OSHA: Occupational Safety & Health Administration.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

References: No data available

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information Other information, including date of preparation or last revision: Prepared by
Other information, including date of preparation or last revision: Disclaimer

Prepared by This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

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SAFETY DATA SHEET
GENGARD* GN8020

1. Identification

Product identifier	**GENGARD GN8020**
Other means of identification	None.
Recommended use	Deposit control agent
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1A
OSHA defined hazards	Not classified.	

Label elements

Signal word	Warning
Hazard statement	Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
Precautionary statement	
Prevention	Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye protection and face protection.
Response	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice or attention. If eye irritation persists: Get medical advice or attention. Take off contaminated clothing and wash it before reuse.
Storage	Store away from incompatible materials.
Disposal	Not available.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Maleic acid	110-16-7	0.1 - 1
CARBOXYLIC ACID POLYMER	TSRN 125438 - 5052P	

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash immediately with plenty of water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Severe eye irritation. Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk. In case of fire and/or explosion do not breathe fumes. Cool containers / tanks with water spray. Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with spilled material. Ensure adequate ventilation. Avoid breathing mist/vapor. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Small Spills: Place in waste disposal container. Wet area may be slippery. Spread sand/grit. Following product recovery, flush area with water. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Large Spills: Cover with plastic sheet to prevent spreading. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Ventilate the area.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Observe good industrial hygiene practices. Do not get in eyes, on skin, on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store in cool, well ventilated area. Store containers closed when not in use. Avoid high temperatures. Protect from freezing. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Wash off after each use. Replace as necessary.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Amber to brown
Odor	Slightly sweet odor
Odor threshold	Not available.
pH (concentrated product)	2.6 Neat
Melting point/freezing point	27 °F (-3 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	Not Applicable
Evaporation rate	Slower than Water
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.17
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	17 mPa.s
Viscosity temperature	70 °F (21 °C)

Other information

Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	3 (5% Solution)
Pour point	32 °F (0 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Oxides of carbon, nitrogen, and sulphur evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.
Symptoms related to the physical, chemical and toxicological characteristics	Immediate effects: Severe eye irritation. Skin irritation. May cause redness and pain. Delayed effects: May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
GENGARD GN8020		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
CARBOXYLIC ACID POLYMER		
Acute		
Oral		
LD50	Rat	4563 mg/kg
Maleic acid (CAS 110-16-7)		
Acute		
Dermal		
LD50	Rabbit	1560 mg/kg
Inhalation		
LC50	Rat	> 2.88 mg/L, 4 Hour
Oral		
LD50	Rat	708 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Not classified.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not classified.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Algae	IC50	Selenastrum (algae)	3872 mg/l, 96 hour (pH adjusted)
	NOEL	Selenastrum (algae)	2000 mg/l, 96 hour (pH adjusted)
Crustacea	LC50	Daphnia magna	3628 mg/l, 48 hour (pH adjusted)
	NOEL	Daphnia magna	1250 mg/l, 48 hour (pH adjusted)
Fish	LC50	Fathead Minnow	5814 mg/l, 96 hour (pH adjusted)
		Rainbow Trout	7071 mg/l, 96 hour (pH adjusted)
	NOEL	Fathead Minnow	5000 mg/l, 96 hour (pH adjusted)
		Rainbow Trout	5000 mg/l, 96 hour (pH adjusted)

Persistence and degradability

- COD (mgO2/g)	359
- BOD 5 (mgO2/g)	21
- BOD 28 (mgO2/g)	3
- Closed Bottle Test (% Degradation in 28 days)	1 OECD 301D
- TOC (mg C/g)	142 (calculated data)

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Maleic acid	-0.48

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and national regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Maleic acid (CAS 110-16-7) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Skin corrosion or irritation Serious eye damage or eye irritation Respiratory or skin sensitization

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Acrylic acid (CAS 79-10-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

NSF Registered and/or meets USDA (according to 1998 guidelines):	Registration No. – 144523 Category Code(s): G5 Cooling and retort water treatment products G7 Boiler, steam line treatment products – nonfood contact

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Sep-26-2014
Revision date	Feb-19-2023
Version #	6.1
NFPA ratings	Health: 2 Flammability: 0 Instability: 0
NFPA ratings	
List of abbreviations	CAS: Chemical Abstract Service Registration Number NFPA: National Fire Protection Association ACGIH: American Conference of Governmental Industrial Hygienists TWA: Time Weighted Average STEL: Short Term Exposure Limit LD50: Lethal Dose, 50% LC50: Lethal Concentration, 50% EC50: Effect Concentration, 50% NOEL: No Observed Effect Level COD: Chemical Oxygen Demand BOD: Biochemical Oxygen Demand TOC: Total Organic Carbon CEN: European Committee for Standardisation IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Product and Company Identification: Product Registration Numbers Composition / Information on Ingredients: Disclosure Overrides Other information, including date of preparation or last revision: Prepared by GHS: Classification
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

* Trademark of Veolia. May be registered in one or more countries.

VEOLIA

SAFETY DATA SHEET
GENGARD* GN8203

1. Identification

Product identifier	**GENGARD GN8203**
Other means of identification	None.
Recommended use	Corrosion inhibitor
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.
Precautionary statement	
Prevention	Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Sodium hydroxide	1310-73-2	2.5 - 10
Chlorotolyltriazole sodium salt	202420-04-0	1 - 2.5

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions Avoid discharge into drains, water courses or onto the ground. Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.

7. Handling and storage

Precautions for safe handling Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure. Do not get this material on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. Take precautions to minimize foaming.

Conditions for safe storage, including any incompatibilities Store locked up. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Store in accordance with local/regional/national/international regulation. Do not freeze. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Splash proof chemical goggles. Face shield.

Skin protection

Hand protection Chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid

Physical state Liquid.

Form Not available.

Color Amber to dark brown

Odor Slight ammonia odor

Odor threshold Not available.

pH (concentrated product)	13.5 Neat
Melting point/freezing point	19 °F (-7 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	Not Applicable
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.2
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	16 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
pH in aqueous solution	12.3 (5% Solution)
Pour point	24 °F (-4 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. None under normal conditions.
Incompatible materials	Strong acids. Strong oxidizing agents.
Hazardous decomposition products	Hydrogen chloride, oxides of carbon and nitrogen evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity	May cause respiratory irritation.

Product	Species	Test Results
GENGARD GN8203		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Chlorotolyltriazole sodium salt (CAS 202420-04-0)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	3100 mg/kg
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Dermal		
LD50	Rabbit	1350 mg/kg
Oral		
LD50	Rabbit	> 500 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Based on available data, the classification criteria are not met.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	911 mg/L, 48 hour (pH adjusted)
		Mysid Shrimp	300 mg/L, 96 hour (Similar Product)
	NOEL	Daphnia magna	500 mg/L, 48 hour (pH adjusted)
Fish	LC50	Fathead Minnow	276 mg/L, 96 hour (pH adjusted)

Product		Species	Test Results
		Menidia beryllina (Silversides)	400 mg/L, 96 hour (Similar Product)
		Rainbow Trout	273 mg/L, 96 hour (pH adjusted)
	NOEL	Fathead Minnow	125 mg/L, 96 hour (pH adjusted)
		Rainbow Trout	200 mg/L, 96 hour (pH adjusted)

Persistence and degradability No data is available on the degradability of this product.

No data is available on the degradability of this product.

- **COD (mgO2/g)** 275 (calculated data)
- **BOD 5 (mgO2/g)** 21 (calculated data)
- **BOD 28 (mgO2/g)** 43 (calculated data)
- **Closed Bottle Test (% Degradation in 28 days)** 14 (calculated data)
- **TOC (mg C/g)** 86 (calculated data)

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

- **UN number** UN1760
- **UN proper shipping name** Corrosive liquids, n.o.s. (Chlorotolyltriazole Sodium Salt, Sodium hydroxide), RQ(Sodium hydroxide)
- **Transport hazard class(es)**
  - **Class** 8
  - **Subsidiary risk** -
- **Packing group** II
- **Special precautions for user** Not available.
- **ERG number** 154

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

- **UN number** UN1760
- **UN proper shipping name** CORROSIVE LIQUID, N.O.S. (Chlorotolyltriazole sodium salt; Sodium hydroxide)
- **Transport hazard class(es)**
  - **Class** 8
  - **Subsidiary risk** -
- **Packing group** II
- **Environmental hazards** No.
- **ERG Code** 154
- **Special precautions for user** Not available.

IMDG

UN number	UN1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Chlorotolyltriazole sodium salt; Sodium hydroxide)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Not available.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium hydroxide (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Corrosive to metal Skin corrosion or irritation Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)	Hazardous substance
Safe Drinking Water Act (SDWA)	Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

NSF Registered and/or meets USDA (according to 1998 guidelines):	Registration No. – 148465 Category Code(s): G5 Cooling and retort water treatment products G7 Boiler, steam line treatment products – nonfood contact

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Sodium hydroxide (CAS 1310-73-2)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Nov-02-2014
Revision date	Feb-19-2023
Version #	5.1
NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	

List of abbreviations	CAS: Chemical Abstract Service Registration Number ACGIH: American Conference of Governmental Industrial Hygienists TWA: Time Weighted Average STEL: Short Term Exposure Limit LD50: Lethal Dose, 50% LC50: Lethal Concentration, 50% NOEL: No Observed Effect Level COD: Chemical Oxygen Demand BOD: Biochemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

Safety Data Sheet (SDS)

North American

Revision date:12/23/2013

SECTION 1: Identification

Product identifiers:

Product trade name: Hidacid* Azure Blue 50 PCT Liquid
Company product number: 20CA2342
Other means of identification: Not Available

Recommended use of the chemical and restrictions on use:

Uses: Dye solution
Restrictions on use: None identified

Details of the supplier:

Distributor/Supplier:
Spectrum Water Technology
6135 Industrial Drive
Geismar, LA 70734
United States

Telephone: 225-647-3566
For further information about this SDS: FAX: 225-647-3566

Emergency telephone number: Chemtrec (24 hours): USA: 1-800-424-9300 CCN726304; International: +001-703-527-3887.

SECTION 2: Hazard(s) identification

Information in accordance with 29 CFR 1910.1200 (Hazcom 2012) in effect on May 25, 2012:

Classification of the chemical in accordance with 29 CFR 1910.1200(d):

Not classified as hazardous under any GHS hazard class.

Label elements in accordance with 29 CFR 1910.1200(f):

Hazard pictogram(s): Not Applicable
Signal word: Not Applicable
Hazard statements: Not Applicable
Precautionary statements: Not Applicable

Supplemental information: Dermal contact may discolor the skin due to dye characteristics.

Notes: No Additional Information

Hazards not otherwise classified: No Additional Information

Information in accordance with 29 CFR 1910.1200 in effect before May 25, 2012:

Potential physical and environmental effects: None known.

Potential health effects - Acute health effects: May cause eye irritation. Repeated or prolonged skin contact may cause irritation. Ingestion may cause irritation. High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.

Potential health effects - Chronic health effects: Prolonged or repeated contact may irritate the skin, causing dermatitis.

See Section 11 for toxicological information.

SECTION 3: Composition/information on ingredients

Mixture:

No Hazardous Components found under applicable regulations.

Notes: This product contains C.I. Acid Blue 9 disodium salt, CAS number 3844-45-9.

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits. Exact percentage values for components are proprietary in accordance with 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

Description of first aid measures:

General: If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

Eye contact: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin contact: Wash the affected area thoroughly with plenty of soap and water. Get medical attention if symptoms occur.

Inhalation: If affected, remove to fresh air. Get medical attention if symptoms occur.

Ingestion: Get medical attention if symptoms occur.

Protection of first aid responders: Wear proper personal protective clothing and equipment.

Most important symptoms and effects, both acute and delayed: Irritation, Skin discoloration due to dye. Pre-existing skin problems may be aggravated by prolonged or repeated contact. See section 11 for additional information.

Indication of any immediate medical attention and special treatment needed, if necessary: Treat symptomatically.

SECTION 5: Fire-fighting measures

NFPA flammability class: IIIB

Extinguishing media:

Suitable: NFPA Class IIIB (Combustible liquid): Use water spray, ABC dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures.

Unsuitable: None known.

Special hazards arising from the chemical:

Unusual fire/explosion hazards: Product is not considered a fire hazard, but will burn if ignited. Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

Hazardous combustion products: Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See section 10 (10.6 Hazardous decomposition products) for additional information.

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 for recommendations on the use of personal protective equipment. If spilled in an enclosed area, ventilate. Eliminate ignition sources.

Environmental precautions: Do not flush product into public sewer, water systems or surface waters.

Methods and materials for containment and cleaning up: Contain by diking with sand, earth or other non-combustible material. Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse.

SECTION 7: Handling and storage

Precautions for safe handling: As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Provide eyewash fountains and safety showers in the work area.

Conditions for safe storage, including any compatibilities: Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not allow product to freeze. Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Protect from light. Empty container contains residual product which may exhibit hazards of product. Do not reuse empty container without commercial cleaning or reconditioning.

SECTION 8: Exposure controls / personal protection

Control parameters:

Occupational exposure limits (OEL): No applicable exposure limits.

Exposure controls:

Appropriate engineering controls: Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. (Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240-1634, USA.) (http://www.acgih.org/home.htm).

Individual protection measures, such as personal protective equipment (PPE):

Eye/face protection: Wear eye protection.

Skin and body protection: Wear protective gloves. Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.

Respiratory protection: Respiratory protection is not needed with proper ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

Further information: Eyewash fountains and safety showers are recommended in the work area.

SECTION 9: Physical and chemical properties

Form:	Viscous liquid	**pH:**	3.5-4.5
Appearance:	Blue	**Relative density:**	1.16
Odor:	None	**Partition coefficient (n-octanol/water):**	Not Available
Odor threshold:	Not Available	**% Volatile by weight:**	>50%
Solubility in water:	Soluble	**VOC:**	Not Applicable
Evaporation rate:	Similar to water	**Boiling point °C:**	100°C
Vapor pressure:	Not Available	**Boiling point °F:**	212°F
Vapor density:	Similiar to water	**Flash point:**	>93 °C (>200 °F)
Viscosity:	Not Available	**Auto-ignition temperature:**	Not Available
Melting point/Freezing point:	Not Available	**Flammability (solid, gas):**	Not Applicable (liquid)
Oxidizing properties:	Not oxidizing	**Flammability or explosive limits:**	**LFL/LEL** Not Available **UFL/UEL** Not Available
Explosive properties:	Not explosive		
Decomposition temperature:	Not Available		

Other information: Amounts specified are typical and do not represent a specification.

SECTION 10: Stability and reactivity

Reactivity: None known.

Chemical stability: This product is stable.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Excessive heat and ignition sources. Do not freeze.

Incompatible materials: Avoid oxidizing agents and reducing agents.

Hazardous decomposition products: After water is evaporated, decomposition or combustion of the dry solids may generate irritating vapors, CO, CO2, oxides of nitrogen, and oxides of sulfur.

SECTION 11: Toxicological information

Information on likely routes of exposure:

General: Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.

Eyes: May cause eye irritation.

Skin: Repeated or prolonged skin contact may cause irritation.

Inhalation: High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.

Ingestion: Ingestion may cause irritation.

Symptoms/effects, acute and delayed: Irritation, Skin discoloration due to dye

Acute toxicity information: Not classified (based on available data, the classification criteria are not met). ATEmix (oral): >5000 mg/kg. ATEmix (dermal): >5000 mg/kg.

Skin corrosion/irritation: Not classified (based on available data, the classification criteria are not met).

Serious eye damage/irritation: Not classified (based on available data, the classification criteria are not met).

Respiratory or skin sensitization: Not classified (based on available data, the classification criteria are not met).

Carcinogenicity: Not classified.

Carcinogenic status: The components of this mixture are not known to be listed or regulated by IARC, NTP, OSHA or ACGIH.

Germ cell mutagenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity (STOT) - single exposure: Not classified.

Specific target organ toxicity (STOT) - repeated exposure: Not classified.

Aspiration hazard: Not classified.

Other toxicity information: No additional information available.

SECTION 12: Ecological information

Ecotoxicity: Freshwater Fish Toxicity: The acute LC50 is >100 mg/L based on component data.

Persistence and degradability: Biodegradation: Expected to biodegrade.

Bioaccumulative potential: Not expected to bioaccumulate.

Mobility in soil: No specific information available.

Other adverse effects: No additional information available.

SECTION 13: Disposal considerations

For waste disposal purposes, this product is not known to be defined or designated as hazardous by current provisions of the Federal (EPA) Resource Conservation and Recovery Act (RCRA, 40CFR261). Incinerate waste product when in liquid form (i.e., as supplied) in a properly permitted (approved) incineration facility in accordance with federal, state and local regulations. Liquids

cannot be disposed of in a landfill.

See Section 8 for recommendations on the use of personal protective equipment.

SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.

UN number: N/A

UN proper shipping name:

Not regulated - See Bill of Lading for Details

Transport hazard class(es):

U.S. DOT hazard class: N/A
Canada TDG hazard class: N/A
Europe ADR/RID hazard class: N/A
IMDG Code (ocean) hazard class: N/A
ICAO/IATA (air) hazard class: N/A

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

Packing group: N/A

Environmental hazards:

Marine pollutant: Not Applicable

Hazardous substance (USA): Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not Applicable

Special precautions for user: Not Applicable

SECTION 15: Regulatory information

Safety, health and environment regulations/legislation specific for the product:

U.S. federal and state regulations/legislation:

This SDS has been prepared in accordance with the hazard criteria of the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Reportable Quantity (RQ):

Not Applicable

U.S. Superfund Amendments and Reauthorization Act (SARA) - SARA Section 313:

None Known

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:
None known to be present or none in reportable amounts for occupational exposure as per OSHA's approval of the California Hazard Communication Standard, Federal Register, page 31159 ff, 6 June 1997.

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards:
None known to be present or none in reportable amounts for occupational exposure as per OSHA's approval of the California Hazard Communication Standard, Federal Register, page 31159 ff, 6 June 1997.

Canada regulations/legislation:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Canadian Workplace Hazardous Material Information System (WHMIS) classification: Not controlled

Canadian Ingredient Disclosure List:

None known to be present or none in reportable amounts

Mexico regulations/legislation:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Chemical inventories:

Regulation	Status
Canadian Domestic Substances List (DSL):	Y
Canadian Non-Domestic Substances List (NDSL):	N
U.S. Toxic Substances Control Act (TSCA):	Y

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory; 2) no information is available; or 3) the component has not been reviewed.

SECTION 16: Other information

SDS Revision date: 12/23/2013

HMIS (Hazardous Materials Identification System) Ratings:

Health: 1 **Flammability:** 0 **Reactivity (Stability):** 0 **Personal Protection:** X

NFPA (National Paint and Coating Association) Ratings:

Health: 1 **Flammability:** 0 **Instability:** 0

Key: 0=Insignificant; 1=Slight; 2=Moderate; 3=High; 4=Extreme. An asterisk appearing after the HMIS Health numerical rating denotes a chronic hazard.

Hazardous Materials Identification System (HMIS), National Paint and Coating Association, rating applies to product "as packaged" (i.e., ambient temperature). Ratings are based upon HMIS® III and NFPA 704 (2007). An asterisk appearing after the HMIS Health® III numerical rating denotes a chronic hazard. National Fire Protection Association (NFPA) rating identifies the severity of hazards of material during a fire emergency (i.e., "on fire").

Legend:

ACGIH: American Conference of Governmental Industrial Hygienists
N/A: Not Applicable
N/E: None Established
STEL: Short Term Exposure Limit
TWA: Time Weighted Average (exposure for 8-hour workday)

Users Responsibility/Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to develop appropriate work practice guidelines and employee instructional programs for your operation.

Safety Data Sheet Preparer:
Product Compliance Department
Spectrum Water Technology
218 W. Eastbank St.
Gonzales, LA 70737
United States

Spectrum Water Technology Safety Data Sheet

SDS No:

Version No: 006 12/30/2015

Order No:

6135 Industrial Drive, Geismar, Louisiana 70734
(225) 647-3565

Emergency Assistance

For emergency assistance involving chemicals
call Chemtrec - (800) 424-9300 CCN726304

SAFETY DATA SHEET
Hydrogen Peroxide 50%

Revision Date: 12/30/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name **Hydrogen Peroxide 50%**

Other means of identification

CAS-No 7722-84-1

Recommended use of the chemical and restrictions on use

Recommended Use: Formulated for aseptic packaging and other food related applications.

Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier

6135 Industrial Drive
Geismar, Louisiana 70734
p: 225.647.3565
f: 225.647.3566
www.spectrumwater.com

Emergency telephone number

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.) CCN726304

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2 Sub-category B
Serious eye damage/eye irritation	Category 1

Hydrogen Peroxide 50%

Specific target organ toxicity (single exposure)	Category 3
Oxidizing Liquids	Category 2

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Danger

Hazard Statements
H318 - Causes serious eye damage
H302 - Harmful if swallowed
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H315 - Causes skin irritation
H270 - May cause or intensify fire; oxidizer

Precautionary Statements - Prevention
P271 - Use only outdoors or in a well-ventilated area
P261 - Avoid breathing mist/vapors/spray
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P221 - Take any precaution to avoid mixing with combustibles/flammables
P220 - Keep/Store away from clothing/flammable materials/combustibles

Precautionary Statements - Response
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P362 + P364 - Take off all contaminated clothing and wash it before reuse
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P370 + P378 - In case of fire: Use water for extinction

Hazards not otherwise classified (HNOC)
No hazards not otherwise classified were identified.

Other Information

Keep container in a cool place out of direct sunlight. Store only in vented containers. Do not store on wooden pallets. Do not return unused material to its original container. Avoid contamination - Contamination could cause decomposition and generation of oxygen which may result in high pressure and possible container rupture. Empty drums should be triple rinsed with water before discarding. .

Hydrogen Peroxide 50%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula HO - OH

Chemical name	CAS-No	
Hydrogen peroxide	7722-84-1	
Water	7732-18-5	

Occupational exposure limits, if available, are listed in section 8

4. FIRST AID MEASURES

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Seek immediate medical attention/advice.

Skin Contact
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

Inhalation
Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion
Rinse mouth. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
In case of accidental ingestion, necrosis may result from mucous membrane burns (mouth, esophagus and stomach). Oxygen rapid release may cause stomach swelling and hemorrhaging, which may product major, or even fatal, injury to organs if a large amount has been ingested.
In case of skin contact, may cause burns, erythema, blisters or even necrosis. Hydrogen Peroxide irritates respiratory system and, if inhaled, may cause inflammation and pulmonary edema. The effects may not be immediate.

Indication of immediate medical attention and special treatment needed, if necessary
Hydrogen peroxide at these concentrations is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful opthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attemps at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water. Do not use any other substance.

Specific Hazards Arising from the Chemical
In closed unventilated containers, risk of rupture due to the increased pressure from decomposition. Contact with combustible material may cause fire

Hazardous Combustion Products
On decomposition product releases oxygen which may intensify fire.

Explosion data
Sensitivity to Mechanical Impact Not sensitive.
Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters
Use water spray to cool fire exposed surfaces and protect personnel. Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Isolate and post spill area. Keep people away from and upwind of spill/leak. Eliminate all sources of ignition and remove combustible materials.

Other Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

Environmental Precautions Do not flush into surface water or sanitary sewer system; if discharged into sewers or watercourses, dilute with plenty of water. See Section 12 for additional Ecological Information.

Methods for Containment Dike to collect large liquid spills. Stop leak and contain spill if this can be done safely. Small spillage: Dilute with large quantities of water.

Methods for cleaning up Flush area with flooding quantities of water. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.

7. HANDLING AND STORAGE

Handling Keep/Store away from clothing/ combustible materials. Wear personal protective equipment. Reference to other sections. Never return unused hydrogen peroxide to original container. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic. Pipes and equipment should be passivated before first use. Use only in well-ventilated areas. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner.

Storage Keep containers in cool areas out of direct sunlight and away from combustibles. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment. Containers must be vented. Keep/store only in original container. Store rooms or warehouses should be made of non-combustible materials with impermeable floors. In case of release, spillage should flow to safe area. Containers should be visually inspected on a regular basis to detect any abnormalities (swollen drums, increases in temperature, etc.).

Incompatible products Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Ingredients with workplace control parameters.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m^3	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m^3	Mexico: TWA 1 ppm Mexico: TWA 1.5 mg/m^3 Mexico: STEL 2 ppm Mexico: STEL 3 mg/m^3
Chemical name	**British Columbia**	**Quebec**	**Ontario TWAEV**	**Alberta**
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m^3	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m^3

Appropriate engineering controls

Engineering measures	Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Use chemical splash-type monogoggles and a full-face shield made of polycarbonate, acetate, polycarbonate/acetate, PETG or thermoplastic.
Skin and Body Protection	For body protection wear impervious clothing such as an approved splash protective suit made of SBR rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/Gore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Overboots made of Latex or PVC, as well as firefighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboot made of nylon or nylon blends. DO NOT USE cotton, wool or leather as these materials react rapidly with higher concentrations of hydrogen peroxide. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite and result in a fire.
Hand Protection	For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. DO NOT use cotton, wool or leather for these materials react RAPIDLY with higher concentrations of hydrogen peroxide. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.
Respiratory Protection	If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)). DO NOT use any form of air-purifying respirator (APR) or filtering facepiece (dust mask), especially those containing oxidizable sorbants such as activated carbon.
Hygiene measures	Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination. .
General information	Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Physical State	Liquid
Color	Colorless
Odor	odorless
Odor threshold	Not applicable
pH	<= 3.7
Melting point/freezing point	-33 °C
Boiling Point/Range	108 °C
Flash point	Not flammable
Evaporation Rate	> 1 (n-butyl acetate=1)
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	Not applicable
Upper flammability limit:	
Lower flammability limit:	
Vapor pressure	23 mm Hg @ 30 °C
Vapor density	No information available
Density	1.13 g/cm³ @ 20ºC
Specific gravity	1.13
Water solubility	completely soluble
Solubility in other solvents	No information available
Partition coefficient	log Kow = -1.5 @ 20 °C
Autoignition temperature	Not combustible
Decomposition temperature	100 °C (adiabatic)

Viscosity, kinematic	1.10 cP @ 20 °C
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	Strong oxidizer
Molecular weight	34
Bulk density	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	Reactive and oxidizing agent.
Chemical Stability	Stable under normal conditions. Decomposes on heating. Stable under recommended storage conditions.
Possibility of Hazardous Reactions	Contact with organic substances may cause fire or explosion. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat; Contamination; Exposure to UV-rays; pH variations.
Incompatible materials	Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.
Hazardous Decomposition Products	Oxygen which supports combustion. Liable to produce overpressure in container.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral	50% solution: LD50 > 225 mg/kg bw (rat) 35 % solution:LD50 1193 mg/kg bw (rat) 70 % solution: LD50 1026 mg/kg bw (rat)
LD50 Dermal	35% solution: LD50 > 2000 mg/kg bw (rabbit) 70 % solution: LD50 9200 mg/kg bw (rabbit)
LC50 Inhalation	50% solution: LC50 > 170 mg/m³ (rat) (4-hr) Hydrogen Peroxide vapors: LC0 9400 mg/m³ (mouse) (5 - 15 minutes) Hydrogen Peroxide vapors: LC50 > 2160 mg/m³ (mouse)
Serious eye damage/eye irritation	Corrosive. Risk of serious damage to eyes.
Skin corrosion/irritation	Moderately irritating (rabbit).
Sensitization	Did not cause sensitization on laboratory animals.

Information on toxicological effects

Symptoms	Vapors, mists, or aerosols of hydrogen peroxide can cause upper airway irritation, inflammation of the nose, hoarseness, shortness of breath, and a sensation of burning or tightness in the chest. Prolonged exposure to concentrated vapor or to dilute solutions can cause irritation and temporary bleaching of skin and hair. Exposure to vapor, mist, or aerosol can cause stinging pain and tearing of eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	This product contains hydrogen peroxide. The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of hydrogen peroxide in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans). The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that hydrogen peroxide is a

'Confirmed Animal Carcinogen with Unknown Relevance to Humans' (A3).

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrogen peroxide 7722-84-1	A3	3		

Mutagenicity This product is not recognized as mutagenic by Research Agencies
In vivo tests did not show mutagenic effects

Reproductive toxicity No toxicity to reproduction in animal studies.

STOT - single exposure May cause respiratory irritation.
STOT - repeated exposure Not classified.

Target organ effects Eyes, Respiratory System, Skin.

Aspiration hazard Aspiration risk: may cause lung damage if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects Hydrogen peroxide is naturally produced by sunlight (between 0.1 and 4 ppb in air and 0.001 to 0.1 mg/L in water). Not expected to have significant environmental effects.

Hydrogen peroxide (7722-84-1)				
Active Ingredient(s)	Duration	Species	Value	Units
Hydrogen peroxide	96 h LC50	Fish Pimephales promelas	16.4	mg/L
Hydrogen peroxide	72 h LC50	Fish Leuciscus idus	35	mg/L
Hydrogen peroxide	48 h EC50	Daphnia pulex	2.4	mg/L
Hydrogen peroxide	24 h EC50	Daphnia magna	7.7	mg/L
Hydrogen peroxide	72 h EC50	Algae Skeletonema costatum	1.38	mg/L
Hydrogen peroxide	21 d NOEC	Daphnia magna	0.63	mg/L

Persistence and degradability Hydrogen peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Hydrogen peroxide half-life in freshwater ranged from 8 hours to 20 days, in air from 10 - 20 hours, and in soils from minutes to hours depending upon microbiological activity and metal contamination.

Bioaccumulation Material may have some potential to bioaccumulate but will likely degrade in most environments before accumulation can occur.

Mobility Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

Other Adverse Effects Decomposes into oxygen and water. No adverse effects.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Dispose of in accordance with local regulations. Can be disposed as waste water, when in compliance with local regulations.

US EPA Waste Number D001

Contaminated Packaging Dispose of in accordance with local regulations.
Drums - Empty as thoroughly as possible. Triple rinse drums before disposal. Avoid contamination; impurities accelerate decomposition. Never return product to original container.

Hydrogen Peroxide 50%

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary class	8
Packing Group	II

TDG

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary class	8
Packing Group	II

ICAO/IATA

Air regulation permit shipment of Hydrogen Peroxide (<=40%) in non-vented containers for Air Cargo Only aircraft, as well as for Passenger and Cargo aircraft. HOWEVER, all PeroxyChem Hydrogen Peroxide containers are vented and therefore, air shipments of PeroxyChem H2O2 are not permitted. IATA air regulations state that venting of packages containing oxidizing substances is not permitted for air transport.

IMDG/IMO

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary Hazard Class	8
Packing Group	II

OTHER INFORMATION

Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drums on wooden pallets.

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	SARA RQ
Hydrogen peroxide 7722-84-1		1000 lb	

Hydrogen Peroxide RQ is for concentrations of > 52% only

Hydrogen Peroxide 50%

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Hydrogen peroxide 7722-84-1 (35)	X	X	X	X	X	X	X	X	X

Mexico - Grade Serious risk, Grade 3

CANADA

WHMIS Hazard Class

C - Oxidizing materials
D1B - Toxic materials
E - Corrosive material
F - Dangerously reactive material




16. OTHER INFORMATION

NFPA	**Health Hazards** 3	**Flammability** 0	**Stability** 1	**Special Hazards** OX
HMIS	**Health Hazards** 3	**Flammability** 0	**Physical hazard** 1	**Special precautions** H

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0
Special Hazards: OX = Oxidizer
Protection = H (Safety goggles, gloves, apron, the use of supplied air or SCBA respirator is required in lieu of a vapor cartidge respirator)

Uniform Fire Code Oxidizer: Class 2--Liquid

Revision date: 12/30/2015
Revision note Initial Release

Disclaimer

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Prepared By:

Spectrum Water Technology
. **End of Safety Data Sheet**

VEOLIA

SAFETY DATA SHEET
INHIBITOR AZ8104

1. Identification

Product identifier	**INHIBITOR AZ8104**
Other means of identification	None.
Recommended use	Water-based corrosion inhibitor
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.
Precautionary statement	
Prevention	Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse. Absorb spillage to prevent material-damage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Chlorotolyltriazole sodium salt	202420-04-0	10 - 20
DICHLOROTOLYLTRIAZOLE	NOT ASSIGNED	2.5 - 10
Sodium 4(or 5)-methyl-1H-benzotriazolide	64665-57-2	1 - 2.5
Sodium hydroxide	1310-73-2	1 - 2.5

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Never return spills to original containers for re-use.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Keep only in the original container. Store away from oxidizers. Store away from acids. Store in a cool, dry place out of direct sunlight.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide adequate ventilation. Eye wash facilities and emergency shower must be available when handling this product. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid

Physical state Liquid.

Form Not available.

Color Yellow to amber

Odor Slight

Odor threshold Not available.

pH (concentrated product) 12.7 Neat

Melting point/freezing point 12 °F (-11 °C)

Initial boiling point and boiling range 210 °F (99 °C)

Flash point Not Applicable

Evaporation rate Slower than Ether

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.13
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	5 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	11.6 (5% Solution)
Pour point	17 °F (-8 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	May be corrosive to metals. May react violently with acidic materials.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing agents. Metals.
Hazardous decomposition products	Hydrogen chloride, oxides of carbon and nitrogen evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

Product	Species	Test Results
INHIBITOR AZ8104		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Chlorotolyltriazole sodium salt (CAS 202420-04-0)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	3100 mg/kg
DICHLOROTOLYLTRIAZOLE		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	3100 mg/kg
Sodium 4(or 5)-methyl-1H-benzotriazolide (CAS 64665-57-2)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	735 mg/kg
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Dermal		
LD50	Rabbit	1350 mg/kg
Oral		
LD50	Rabbit	> 500 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer. This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Based on available data, the classification criteria are not met. Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
	LC50	Annelida(Lumbriculus variegatus)	138 mg/L, 96 hour

Product		Species	Test Results
		Benthic Crustacean(Gammerus pseutolimnaeus)	42.1 mg/L, 96 hour
		Freshwater Snail(Physa sp.)	47.4 mg/L, 96 hour
		Midge larvae (Chironomus tentans)	95.8 mg/L, 96 hour
	NOEL	Annelida(Lumbriculus variegatus)	62.5 mg/L, 96 hour
		Benthic Crustacean(Gammerus pseutolimnaeus)	25 mg/L, 96 hour
		Freshwater Snail(Physa sp.)	25 mg/L, 96 hour
		Midge larvae (Chironomus tentans)	62.5 mg/L, 96 hour
Other	EC50	Pseudokirchnerella subcapitata	132 mg/l, 96 Hours
Aquatic			
Crustacea	EC0	Daphnia magna	155 mg/L, 48 hour (pH adjusted)
	EC50	Daphnia magna	210 mg/L, 48 hour (pH adjusted)
			50 mg/L, 21 day (pH adjusted)
	LC50	Ceriodaphnia	124 mg/L, 48 hour
		Daphnia magna	217 mg/L, 48 hour (pH adjusted)
		Mysid Shrimp	53 mg/L, 48 hour (pH adjusted)
	LOEL	Ceriodaphnia	40 mg/L, 7 day
	NOEL	Ceriodaphnia	75 mg/L, 48 hour
			20 mg/L, 7 day
		Daphnia magna	148 mg/L, 48 hour (pH adjusted)
			27 mg/L, 21 day (pH adjusted)
		Mysid Shrimp	25 mg/L, 48 hour (pH adjusted)
Fish	LC50	Bluegill Sunfish	36.6 mg/L, 96 hour
		Fathead Minnow	135 mg/L, 96 hour (pH adjusted)
			50.7 mg/L, 96 hour (pH adjusted)
		Menidia beryllina (Silversides)	41 mg/L, 96 hour
		Rainbow Trout	15.4 mg/L, 96 hour
		Sheepshead Minnow	132 mg/L, 96 hour (pH adjusted)
	LOEL	Fathead Minnow	8.3 mg/L, 28 day (pH adjusted)
	NOEL	Bluegill Sunfish	25 mg/L, 96 hour
		Fathead Minnow	21.8 mg/L, 96 hour (pH adjusted)
			15 mg/L, 96 hour (pH adjusted)
			4.2 mg/L, 28 day (pH adjusted)
		Menidia beryllina (Silversides)	25 mg/L, 96 hour
		Rainbow Trout	6.3 mg/L, 96 hour
		Sheepshead Minnow	100 mg/L, 96 hour (pH adjusted)

Persistence and degradability

- COD (mgO2/g)	300
- BOD 5 (mgO2/g)	15
- BOD 28 (mgO2/g)	15
- Closed Bottle Test (% Degradation in 28 days)	6
- Zahn-Wellens Test (% Degradation in 28 days)	0
- TOC (mg C/g)	100

Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1760
UN proper shipping name	Corrosive liquids, n.o.s. (SODIUM HYDROXIDE, HALOGENATED AROMATIC HETEROCYCLE)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Special precautions for user	Not available.
ERG number	154

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN1760
UN proper shipping name	Corrosive liquid, n.o.s. (SODIUM HYDROXIDE, HALOGENATED AROMATIC HETEROCYCLE)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	No.
ERG Code	154
Special precautions for user	Not available.

IMDG

UN number	UN1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, HALOGENATED AROMATIC HETEROCYCLE)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Not available.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium hydroxide (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Corrosive to metal
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

NSF Registered and/or meets USDA (according to 1998 guidelines):

Registration No. – 141530
Category Code(s):
G5 Cooling and retort water treatment products
G7 Boiler, steam line treatment products – nonfood contact

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Sodium hydroxide (CAS 1310-73-2)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Oct-24-2014

Revision date Feb-18-2023

Version # 1.1

NFPA ratings Health: 3
Flammability: 0
Instability: 0

NFPA ratings

List of abbreviations

CAS: Chemical Abstract Service Registration Number
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
ACGIH: American Conference of Governmental Industrial Hygienists
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

References: No data available

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information This document has undergone significant changes and should be reviewed in its entirety.

Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

VEOLIA

SAFETY DATA SHEET
INHIBITOR ECP8130

1. Identification

Product identifier	**INHIBITOR ECP8130**
Other means of identification	None.
Recommended use	Corrosion inhibitor
Recommended restrictions	Industrial use only.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage.
Precautionary statement	
Prevention	Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
Storage	Store locked up. Store in corrosive resistant container with a resistant inner liner.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Sodium hydroxide	1310-73-2	1 - 2.5
Halogenated Aromatic Heterocycle	TSRN 125438 - 7795	

Multi-constituent substance(s)

Chemical name	Common name and synonyms	CAS number	%
Reaction mass of sodium 4-chloro-5-alkylbenzotriazolide and sodium 5-chloro-4-alkylbenzotriazolide and sodium 4-chloro-7-alkylbenzotriazolide and sodium 5-chloro-6-alkylbenzotriazolide		N/A	5 - 10

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in tightly closed container. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide adequate ventilation. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Liquid

Physical state

Liquid.

Form

Not available.

Color

Light yellow

Odor	Characteristic
Odor threshold	Not available.
pH (concentrated product)	13.5 Neat
Melting point/freezing point	18 °F (-8 °C)
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	> 199 °F (> 93 °C) P-M(CC)
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.21
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	8 mPa.s
Viscosity temperature	73 °F (23 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	12.5 (5% Solution)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	May be corrosive to metals.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Aluminum.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Immediate effects: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Delayed effects: Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity	Not classified.

Product	Species	Test Results
INHIBITOR ECP8130		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
Halogenated Aromatic Heterocycle		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	3100 mg/kg
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Dermal		
LD50	Rabbit	1350 mg/kg
Oral		
LD50	Rabbit	> 500 mg/kg

Multi-constituent substance(s)	Species	Test Results
Reaction mass of sodium 4-chloro-5-alkylbenzotriazolide and sodium 5-chloro-4-alkylbenzotriazolide and sodium 4-chloro-7-alkylbenzotriazolide and sodium 5-chloro-6-alkylbenzotriazolide		
Acute		
Dermal		
	Rabbit	> 2000 mg/kg
Oral		
	Rat	> 2000 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Not classified.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not classified.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	ChV	Ceriodaphnia	141.4 mg/L, 7 D (pH adjusted)
	IC25	Ceriodaphnia	127.7 mg/L, 7 D (pH adjusted)
	LC50	Ceriodaphnia	405 mg/L, 48 H (pH adjusted)
		Daphnia magna	365.9 mg/L, 48 H (pH adjusted)
		Mysid Shrimp	182.1 mg/L, 96 H (pH adjusted)
	LOEL	Ceriodaphnia	200 mg/L, 7 D (pH adjusted)
	NOEL	Ceriodaphnia	250 mg/L, 48 H (pH adjusted)
			100 mg/L, 7 D (pH adjusted)
		Daphnia magna	250 mg/L, 48 H (pH adjusted)
		Mysid Shrimp	125 mg/L, 96 H (pH adjusted)
Fish	LC50	Fathead Minnow	163.4 mg/L, 96 H (pH adjusted)
		Rainbow Trout	44.2 mg/L, 96 H (pH adjusted)
	NOEL	Fathead Minnow	125 mg/L, 96 H (pH adjusted)
		Rainbow Trout	31.3 mg/L, 96 H (pH adjusted)

Persistence and degradability

- COD (mgO2/g)	120 (calculated data)
- BOD 5 (mgO2/g)	4 (calculated data)
- BOD 28 (mgO2/g)	4 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	3 (calculated data)
- TOC (mg C/g)	44 (calculated data)
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1760
UN proper shipping name	Corrosive liquids, n.o.s. (Sodium hydroxide, HALOGENATED AROMATIC HETEROCYCLE), RQ(Sodium hydroxide)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
ERG number 154
Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number UN1760
UN proper shipping name Corrosive liquid, n.o.s. (Sodium hydroxide, HALOGENATED AROMATIC HETEROCYCLE)
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group II
Environmental hazards No.
ERG Code 154
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, HALOGENATED AROMATIC HETEROCYCLE), RQ(Sodium hydroxide)
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group II
Environmental hazards
Marine pollutant No.
EmS F-A, S-B
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium hydroxide (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Corrosive to metal Skin corrosion or irritation Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Formaldehyde (CAS 50-00-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Formaldehyde (CAS 50-00-0)

Safe Drinking Water Act (SDWA)	Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Sodium hydroxide (CAS 1310-73-2)

California Proposition 65

WARNING: WARNING: This product can expose you to Formaldehyde, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Formaldehyde (CAS 50-00-0) Listed: January 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Dec-15-2020
Revision date	Feb-22-2023
Version #	3.1
NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	

List of abbreviations	DOT: Department of Transportation (49 CFR 172.101). GHS: Globally Harmonized System of Classification and Labeling of Chemicals. IARC: International Agency for Research on Cancer. OSHA: Occupational Safety & Health Administration. WHMIS: Workplace Hazardous Materials Information System. ACGIH: American Conference of Governmental Industrial Hygienists BOD: Biochemical Oxygen Demand CAS: Chemical Abstract Service Registration Number COD: Chemical Oxygen Demand NFPA: National Fire Protection Association IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code LC50: Lethal Concentration, 50% LD50: Lethal Dose, 50% NOEL: No Observed Effect Level STEL: Short Term Exposure Limit TOC: Total Organic Carbon TSRN indicates a Trade Secret Registry Number is used in place of the CAS number. TWA: Time Weighted Average
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Product and Company Identification: Physical States Hazard(s) identification: Supplemental information Composition / Information on Ingredients: Additional Components First-aid measures: Eye contact Handling and storage: Precautions for safe handling Transport Information: Material Transportation Information Other information, including date of preparation or last revision: Prepared by HazReg Data: Europe - EU GHS: Classification
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

SAFETY DATA SHEET
KLARAID* IC1172

1. Identification

Product identifier	**KLARAID IC1172**
Other means of identification	None.
Recommended use	Waste treatment additive.
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.

Label elements

Hazard symbol	None.
Signal word	None.
Hazard statement	The material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard's (29CFR 1910.1200) implementation of the Globally Harmonized System (GHS), i.e., material is not a dangerous substance or mixture requiring GHS classification.

Precautionary statement

Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

Composition comments	Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation. Information for specific product ingredients as required by the WHMIS Regulations is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation	Move to fresh air.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Wash contaminated clothing before reuse.
Eye contact	Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Do not induce vomiting. Do not feed anything by mouth to an unconscious or convulsive victim.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.

7. Handling and storage

Precautions for safe handling	Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Do not freeze. If frozen, thaw completely and mix thoroughly prior to use. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Not available.
Color	Colorless to light yellow
Odor	Mild
Odor threshold	Not available.
pH (concentrated product)	3.7 Neat
Melting point/freezing point	19 °F (-7 °C)
Initial boiling point and boiling range	219 °F (104 °C)
Flash point	Not Applicable
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.34
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	28 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	4.5 (5% Solution)
Pour point	24 °F (-4 °C)
VOC	0 % CALCULATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.

Hazardous decomposition products Hydrogen chloride.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Prolonged or repeated contact may cause irritation.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
KLARAID IC1172		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer. This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Not classified.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not classified. Not an aspiration hazard.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	0% Mortality	Daphnia magna	2500 mg/L, 48 hour (pH adjusted)
	20% Mortality	Daphnia magna	5000 mg/L, 48 hour (pH adjusted)
	LC50	Ceriodaphnia	750 mg/L, 48 hour (pH adjusted)
	LOEL	Ceriodaphnia	3.1 mg/L, 7 day
	NOEL	Ceriodaphnia	156 mg/L, 48 hour (pH adjusted)

Product		Species	Test Results
			1.5 mg/L, 7 day
Fish	LC50	Fathead Minnow	517 mg/L, 96 hour
		Rainbow Trout	390 mg/L, 96 hour
	LOEL	Fathead Minnow	10 mg/L, 7 day
	NOEL	Fathead Minnow	370 mg/L, 96 hour
			5 mg/L, 7 day
		Rainbow Trout	210 mg/L, 96 hour

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Nickel dichloride (CAS 7718-54-9)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

California Proposition 65

WARNING: California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Nickel dichloride (CAS 7718-54-9) Listed: May 7, 2004

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Nickel dichloride (CAS 7718-54-9) Listed: October 26, 2018

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Nickel dichloride (CAS 7718-54-9) Listed: October 26, 2018

16. Other information, including date of preparation or last revision

Issue date Oct-29-2014

Revision date Feb-12-2023

Version # 7.2

NFPA ratings Health: 0
Flammability: 0
Instability: 0

NFPA ratings

List of abbreviations

OSHA: Occupational Safety & Health Administration.
CAS: Chemical Abstract Service Registration Number
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association

References: No data available

Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

SAFETY DATA SHEET
KLARAID* PC1192

1. Identification

Product identifier **KLARAID PC1192**

Other means of identification None.

Recommended use Coagulant

Recommended restrictions Industrial use only.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification. The material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard's (29CFR 1910.1200) implementation of the Globally Harmonized System (GHS), i.e., material is not a dangerous substance or mixture requiring GHS classification.

Precautionary statement

Prevention Wash thoroughly after handling.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation	Move to fresh air. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.
Skin contact	Do not peel polymer from the skin. Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Oxides of carbon and nitrogen evolved in fire. Hydrogen chloride gas (HCl).
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Observe good industrial hygiene practices. See Section 8 of the SDS for Personal Protective Equipment.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Protect from freezing. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits	This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).

Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Yellow
Odor	Mild
Odor threshold	Not available.
pH (concentrated product)	6.3 Neat
Melting point/freezing point	30 °F (-1 °C)
Initial boiling point and boiling range	Not available.
Flash point	Not Applicable
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.03
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	250 mPa.s
Viscosity temperature	75 °F (24 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	6.2 (5% Solution)
Pour point	35 °F (2 °C)
VOC	0 % ASTM 3960-93

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Oxides of carbon and nitrogen evolved in fire. Hydrogen chloride gas (HCl).

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dusts, vapours, mists or aerosols may cause irritation to upper respiratory tract.
Skin contact	Prolonged or repeated contact may cause irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
KLARAID PC1192		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	This product is not expected to cause respiratory sensitization.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Ceriodaphnia	9.3 mg/l, 48 hour (With Humic Acid)
		Daphnia magna	32 mg/l, 48 hour (With Humic Acid)
		Mysid Shrimp	628.5 mg/l, 48 hour
	LOEL	Ceriodaphnia	2 mg/l, 7 day

Product		Species	Test Results
	NOEL	Ceriodaphnia	6.25 mg/l, 48 hour (With Humic Acid)
			1 mg/l, 7 day
		Daphnia magna	15.6 mg/l, 48 hour (With Humic Acid)
		Mysid Shrimp	125 mg/l, 48 hour
Fish	LC50	Fathead Minnow	3.8 mg/l, 96 hour (With Humic Acid)
		Rainbow Trout	14.1 mg/l, 96 hour (With Humic Acid)
	LOEL	Fathead Minnow	2 mg/l, 7 day
	NOEL	Fathead Minnow	2.5 mg/l, 96 hour (With Humic Acid)
			1 mg/l, 7 day
		Rainbow Trout	10 mg/l, 96 hour (With Humic Acid)
		Sheepshead Minnow	2000 mg/l, 96 hour

Persistence and degradability

- COD (mgO2/g)	270
- BOD 5 (mgO2/g)	0
- BOD 28 (mgO2/g)	7
- Closed Bottle Test (% Degradation in 28 days)	3
- Zahn-Wellens Test (% Degradation in 28 days)	6
- TOC (mg C/g)	90

Bioaccumulative potential Not bioaccumulating

Partition coefficient n-octanol / water (log Kow)
< 0

Bioconcentration factor (BCF)
0

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated “active”.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration 21 CFR 176.170 (components of paper and paperboard in contact with aqueous and fatty foods)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Oct-20-2014

Revision date Feb-11-2023

Version # 4.2

NFPA ratings	Health: 0 Flammability: 0 Instability: 0
NFPA ratings	
List of abbreviations	CAS: Chemical Abstract Service Registration Number ACGIH: American Conference of Governmental Industrial Hygienists TWA: Time Weighted Average STEL: Short Term Exposure Limit LD50: Lethal Dose, 50% LC50: Lethal Concentration, 50% NOEL: No Observed Effect Level COD: Chemical Oxygen Demand BOD: Biochemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code NFPA: National Fire Protection Association DOT: Department of Transportation (49 CFR 172.101). GHS: Globally Harmonized System of Classification and Labeling of Chemicals. IARC: International Agency for Research on Cancer. OSHA: Occupational Safety & Health Administration. WHMIS: Workplace Hazardous Materials Information System. TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Other information, including date of preparation or last revision: Prepared by
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

* Trademark of Veolia. May be registered in one or more countries.

SAFETY DATA SHEET
KLEEN AC9502

1. Identification

Product identifier	**KLEEN AC9502**
Other means of identification	None.
Recommended use	Metal cleaner
Recommended restrictions	Industrial use only.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.
Precautionary statement	
Prevention	Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant/ container with a resistant inner liner.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Citric acid	77-92-9	40 - 60

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. If nasal, throat or lung irritation develops - remove to fresh air and get medical attention.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Carbon dioxide (CO2). Foam. Dry chemical powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Should not be released into the environment. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Acidic. Do not mix with alkaline material. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. Do not get in eyes, on skin, or on clothing.

Conditions for safe storage, including any incompatibilities	Store locked up. Store in corrosive resistant container with a resistant inner liner. Do not store in aluminum containers. Protect from freezing. If frozen, thaw completely and mix thoroughly prior to use. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Store in accordance with local/regional/national/international regulation. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear appropriate chemical resistant clothing. Rubber, butyl, viton or neoprene gloves. Wash off after each use. Replace as necessary.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Not available.
Color	Yellow
Odor	Pungent vinegar-like odor
Odor threshold	Not available.
pH (concentrated product)	< 1 Neat
Melting point/freezing point	18 °F (-8 °C)
Initial boiling point and boiling range	219 °F (104 °C)
Flash point	> 199 °F (> 93 °C)
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.19
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	7 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	60
pH in aqueous solution	2 (5% Solution)
Pour point	23 °F (-5 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	May react violently with alkaline materials. Reacts violently with strong alkaline substances. This product may react with reducing agents. May be corrosive to metals.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Contact with water reactive compounds may cause fire or explosion. Hazardous polymerization does not occur.
Conditions to avoid	Protect from freezing. Avoid contact with strong bases. Avoid contact with strong oxidizers. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. Do not mix with other chemicals.
Incompatible materials	Avoid contact with strong bases. Avoid contact with strong oxidizers. Bases. Strong oxidizing agents. Reducing agents. Metals.
Hazardous decomposition products	Oxides of carbon, nitrogen and phosphorus evolved in fire. Hydrogen chloride gas (HCl).

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
KLEEN AC9502		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Citric acid (CAS 77-92-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	5400 mg/kg

Skin corrosion/irritation	Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer. This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not classified. Aspiration of this product may cause the same corrosiveness/irritation impacts as if it were ingested.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	570 mg/L, 48 hour (pH adjusted)
	NOEL	Daphnia magna	274.6 mg/L, 48 hour (pH adjusted)
Fish	0% Mortality	Fathead Minnow	500 mg/L, 96 hour
		Rainbow Trout	3200 mg/L, 72 hour
	65% Mortality	Fathead Minnow	2000 mg/L, 96 hour

Persistence and degradability

- COD (mgO2/g)	317 (calculated data)
- BOD 5 (mgO2/g)	172 (calculated data)
- BOD 28 (mgO2/g)	183 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	57 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days)	72 (calculated data)
- TOC (mg C/g)	149 (calculated data)

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Citric acid -1.64

Bioconcentration factor (BCF)

Citric acid 3

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (CITRIC ACID)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	153

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (CITRIC ACID)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	153
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations

All components are on the U.S. EPA TSCA Inventory List.
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical: Yes

Classified hazard categories:
Corrosive to metal
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Formaldehyde (CAS 50-00-0)
Hydrochloric acid (CAS 7647-01-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Formaldehyde (CAS 50-00-0)
Hydrochloric acid (CAS 7647-01-0)

Safe Drinking Water Act (SDWA): Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

California Proposition 65

WARNING: WARNING: This product can expose you to Formaldehyde, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Formaldehyde (CAS 50-00-0) Listed: January 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Oct-29-2014
Revision date	Feb-11-2023
Version #	2.1
NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	
List of abbreviations	DOT: Department of Transportation (49 CFR 172.101). GHS: Globally Harmonized System of Classification and Labeling of Chemicals. IARC: International Agency for Research on Cancer. OSHA: Occupational Safety & Health Administration. WHMIS: Workplace Hazardous Materials Information System. CAS: Chemical Abstract Service Registration Number TWA: Time Weighted Average STEL: Short Term Exposure Limit LD50: Lethal Dose, 50% LC50: Lethal Concentration, 50% NOEL: No Observed Effect Level COD: Chemical Oxygen Demand BOD: Biochemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code NFPA: National Fire Protection Association ACGIH: American Conference of Governmental Industrial Hygienists TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

SDS no. PID971
Version 6
Revision date 09/Feb/2017
Supersedes date 22/Dec/2016

A Schlumberger Company

Safety Data Sheet
M-I GEL*

1. Identification

1.1 Product identifier

Product name M-I GEL*

Product code PID971

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Drilling fluid additive.

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier
M-I L.L.C.
P.O.Box 42842
Houston, TX 77242
www.miswaco.slb.com
Telephone: 1 281-561-1511

Schlumberger Canada, Ltd.
200, 125 - 9th Avenue SE
Calgary, Alberta T2G 0P6, Canada
Telephone: 1-613-992-4624

E-mail address sdsmi@slb.com

Prepared by
Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Bethicia Prasek

1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600, Argentina: +54 11 5984 3690
Telephone Number - Emergency telephone number (24 Hour) Canada (English/French): +1 866 928 0789

2. Hazards identification

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

Environmental hazards Not classified

Physical Hazards Not classified

2.2 Label elements

Signal word
DANGER

Hazard statements
H350 - May cause cancer
H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

Precautionary statements
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe dust
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing and eye/face protection
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified
None known

Unknown acute toxicity Not applicable.

3. Composition/information on Ingredients

3.1 Substances

Chemical Name	CAS No	Weight-%
Crystalline silica (impurity)	14808-60-7	<10

3.2 Mixtures

Not applicable

Comments
Percentages (concentrations) represented as a range are due to batch-to-batch variability.

4. First aid measures

4.1 First-Aid Measures

Inhalation	Move to fresh air. If breathing is difficult, (trained personnel should) give oxygen. Get medical attention immediately if symptoms occur.
Ingestion	Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.
Eye contact	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

Main symptoms

Inhalation	Please see Section 11. Toxicological Information for further information.
Ingestion	Please see Section 11. Toxicological Information for further information.
Skin contact	Please see Section 11. Toxicological Information for further information.
Eye contact	Please see Section 11. Toxicological Information for further information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing media appropriate for surrounding material.

Extinguishing media which must not be used for safety reasons
None known.

5.2 Special hazards arising from the substance or mixture

Unusual fire and explosion hazards
None known.

Hazardous combustion products
Thermal decomposition can lead to release of irritating gases and vapors, React with hydrofluoric acid (HF) forming toxic gas (SiF4).

5.3 Advice for firefighters

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus and full protective gear.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment. Evacuate personnel to safe areas. Prevent further leakage or spillage if safe to do so. Avoid dust formation.

6.2 Environmental precautions

Do not allow material to contaminate ground water system.

Environmental exposure controls
No information available.

6.3 Methods and material for containment and cleaning up

Methods for containment
Cover powder spill with plastic sheet or tarp to minimize spreading. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Sweep up and shovel into suitable containers for disposal. Avoid generating or breathing dust. Product is slippery if wet.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and storage

7.1 Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe dust. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

Storage precautions Protect from moisture Keep containers tightly closed in a dry, cool and well-ventilated place. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

8. Exposure controls/personal protection

8.1 Control parameters

Component Information

Component	ACGIH TLV	OSHA PEL
Crystalline silica (impurity) 14808-60-7 (<10)	0.025 mg/m³	total dust respirable fraction

Crystalline silica (impurity)
OSHA - Final PELs - Table Z-3 Mineral Dusts
(30)/(%SiO2 + 2) mg/m³ TWA, total dust; (250)/(%SiO2 + 5) mppcf TWA, respirable fraction; (10)/(%SiO2 + 2) mg/m³ TWA, respirable fraction

8.2 Exposure controls

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering measures to reduce exposure
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye protection	Tightly fitting safety goggles.
Hand protection	Wear chemical resistant gloves such as nitrile or neoprene.
Respiratory Protection	All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent.If exposed to airborne particles of this product use at least a NIOSH-approved N95 half-mask disposable or re-useable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half-mask disposable or re-useable particulate respirator.
Skin and body protection	Wear suitable protective clothing and gloves, Eye wash and emergency shower must be available at the work place.
Hygiene measures	Wash hands before breaks and immediately after handling the product, Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	Opaque
Color	Tan - Gray
Odor	Odorless
Odor threshold	Not applicable

Property	Values	Remarks
pH	Not applicable	
pH @ dilution	N/D	
Melting / freezing point	No information available	
Boiling point/range	No information available	
Flash point	Not applicable	
Evaporation rate (BuAc =1)	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	2.3 - 2.6	
Bulk density	No information available	
Water solubility	slightly soluble	
Solubility in other solvents	Insoluble	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
log Pow	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

9.2 Other information

Pour point	No information available
Molecular weight	No information available

VOC content(%) No information available
Density No information available

10. Stability and reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable. Hazardous polymerization does not occur.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization
Hazardous polymerization does not occur.

Hazardous Reactions
None known.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Hydrofluoric acid (HF).

10.6 Hazardous decomposition products

See Section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Repeated or prolonged inhalation of crystalline silica dust can cause delayed lung injury, and other diseases, including silicosis and lung cancer.

Eye contact Dust may cause mechanical irritation.

Skin contact Repeated exposure may cause skin dryness or cracking.

Ingestion Irritant; may cause pain or discomfort to mouth, throat and stomach

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica (impurity)	= 500 mg/kg (Rat)	No data available	No data available

Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Crystalline silica (impurity)	Group 1; Monograph 100C [2012] Monograph 100C	A2 Suspected Human Carcinogen	Present	Known Human Carcinogen

	[2012] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997] Group 1; Monograph 68 [1997]			

Sensitization Not classified.

Mutagenic effects No evidence of mutagenic properties.

Carcinogenicity Contains a known or suspected carcinogen. Crystalline silica dust is listed by IARC in Group 1 as known to cause lung cancer in humans, if inhaled.

Reproductive toxicity No evidence of toxicity to reproduction.

Developmental toxicity Not known to cause birth defects or have a deleterious effect on a developing fetus.

Routes of exposure Skin contact. Inhalation. Eye contact.

Routes of entry Inhalation.

Specific target organ toxicity (single exposure) Not classified

Specific target organ toxicity (repeated exposure) Category 2.

Target organ effects Respiratory system. Lungs.

Aspiration hazard Not applicable.

12. Ecological information

12.1 Toxicity

Toxicity to algae
See component information below.

Toxicity to fish
See component information below.

Toxicity to daphnia and other aquatic invertebrates
See component information below.

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Crystalline silica (impurity)	No information available	No information available	No information available

12.2 Persistence and degradability

No product level data available.

12.3 Bioaccumulative potential

No product level data available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)
This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

12.6 Other adverse effects.

None known.

13. Disposal considerations

13.1 Waste treatment methods

Disposal Method	Disposal should be made in accordance with federal, state and local regulations.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

14.1. UN number

UN No. (DOT)	Not regulated
UN No. (TDG)	Not regulated
UN/ID No. (ADR/RID/ADN/ADG)	Not regulated
UN No. (IMDG)	Not regulated
UN No. (ICAO)	Not regulated

14.2. UN proper shipping name

The product is not covered by international regulation on the transport of dangerous goods

14.3 Hazard class(es)

DOT Hazard class	Not regulated
TDG Hazard class	Not regulated
ADR/RID/ADN/ADG Hazard class	Not regulated
IMDG Hazard class	Not regulated
ICAO Hazard class/division	Not regulated

14.4 Packing group

DOT Packing group	Not regulated
TDG Packing group	Not regulated
ADR/RID/ADN/ADG Packing group	Not regulated
IMDG Packing group	Not regulated
ICAO Packing group	Not regulated

14.5 Environmental hazard

Marine pollutant	No

14.6 Special precautions
Not applicable

15. Regulatory information

International inventories

USA (TSCA)	Complies
Canada (DSL)	Complies
European Union (EINECS and ELINCS)	Complies
Philippines (PICCS)	Complies
Japan (ENCS)	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Complies
New Zealand (NZIoC)	Complies

U.S. Federal and State Regulations

SARA 311/312 Hazard Categories
Delayed (chronic) health hazard.

Chemical Name	SARA 302 / TPQs	SARA 313	CERCLA RQ
Crystalline silica (impurity)	N/A	N/A	N/A

State Comments
Proposition 65: This product contains chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 to cause cancer and/or reproductive toxicity.

Crystalline silica (impurity)
Carcinogen

Canadian Classification

This Safety Data Sheet has been prepared in compliance with the Hazardous Products Regulations.

16. Other information

Supersedes date	22/Dec/2016
Revision date	09/Feb/2017
Version	6
This SDS has been revised in the following section(s)	1, 16. Updated according to WHMIS 2015.
HMIS classification	

Health	1*
Flammability	0
Physical hazard	0
PPE	E

N/A - Not Applicable, N/D - Not Determined.

*A mark of M-I L.L.C., a Schlumberger Company

Disclaimer

The information contained herein is considered in good faith as reliable of the date issued and is based upon on measurements, tests or data derived from supplier's own study or furnished by others. In providing this SDS information, Supplier makes no express or implied warranties as to the information or product; merchantability or fitness of purpose; any express or implied warranty; or non-infringement of intellectual property rights; and supplier assumes no responsibility for any direct, special or consequential damages, results obtained, or the activities of others. To the maximum extent permitted by law, supplier's warranty obligations and buyer's sole remedies are as stated in separate agreement between the parties.

Safety Data Sheet
OLI-8000

1. Product and company identification

Product name	:	OLI-8000
Synonym	:	Organic acids
INCI Name	:	TALL OIL ACID
CAS number	:	61790-12-3
Material uses	:	Petrochemical industry: Petrochemicals. Fuel additive.
Internal code	:	10068
System code	:	10068
Supplier	:	Innospec Fuel Specialties LLC 8310 South Valley Highway Suite 350 Englewood CO, 80112 USA
Information contact	:	1-800-441-9547
e-mail address of person responsible for this SDS	:	sdsinfo@innospecinc.com
NON-emergency enquiries	:	corporatecommunications@innospecinc.com

Emergency telephone number

In USA, Canada and North America, 24 hour / 7 day emergency information for our product is provided by the CHEMTREC® Emergency Call Center based in the USA

Country information	: **Emergency telephone number**
USA, Canada, Puerto Rico, Virgin Islands	: +1 800 424 9300
In case of difficulties, or for ships at sea	: +1 703 527 3887

In Europe, Middle East, Africa, Asia Pacific and South America 24 hour / 7 day emergency response for our products is provided by the NCEC CARECHEM 24 global network

CARECHEM24

The main regional centres are listed here in Section 1.
Other local contact numbers for specific language support in Asia Pacific are listed in Section 16

Country information	: **Emergency telephone number**	**Location**
South America (all countries)	: +1 215 207 0061	Philadelphia USA
Brazil	: +55 11 3197 5891	Brazil
Mexico	: +52 555 004 8763	Mexico
Europe (all countries) Middle East, Africa (French, Portuguese, English)	: +44 (0) 1235 239 670	London, UK
Middle East, Africa (Arabic, French, English)	: +44 (0) 1235 239 671	Lebanon
Asia Pacific (all countries except China)	: +65 3158 1074	Singapore
China	: +86 10 5100 3039	Beijing China

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

See toxicological information (Section 11)

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : Organic acid.

Other means of identification : Organic acids

Ingredient name	%	CAS number
Organic acid.	60 - 100	61790-12-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Additional information

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : This material increases the risk of fire and may aid combustion.

Remark : Not classified.

Flash point : Closed cup: >100°C (>212°F) [Pensky-Martens.]
Open cup: 205°C (401°F) [Cleveland.]

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.Hazard of slipping on spilled product.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 30°C (86°F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Organic acid.	**OSHA PEL (United States).** TWA: 5 mg/m³, (Mist) Form: Respirable **ACGIH TLV (United States).** STEL: 10 mg/m³, (Mist) Form: Respirable TWA: 5 mg/m³, (Mist) Form: Respirable

Section 8. Exposure controls/personal protection

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: splash goggles

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. > 8 hours (breakthrough time): Viton®
1 - 4 hours (breakthrough time): PVC

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapor filter (Type A)
Possible:

Personal protective equipment (Pictograms) :

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Yellow.

Odor : Faint odor.

Odor threshold : Not available.

pH : Not applicable.

Melting point : Not available.

Section 9. Physical and chemical properties

Boiling point	:	>200°C (>392°F)
Flash point	:	Closed cup: >100°C (>212°F) [Pensky-Martens.] Open cup: 205°C (401°F) [Cleveland.]
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	This material increases the risk of fire and may aid combustion.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	<0.0001 kPa (<0.001 mm Hg) (at 20°C)
Vapor density	:	Not available.
Density	:	0.9 to 0.92 g/cm³ [15°C (59°F)]
Specific gravity	:	0.905 [ASTM D 4052]
Density	:	7.58 lbs/gal
Solubility	:	Insoluble in the following materials: cold water.
Solubility in water	:	0.0126 g/l
Partition coefficient: n-octanol/water	:	>3
Auto-ignition temperature	:	362°C (683.6°F)
Decomposition temperature	:	Not available.
Viscosity	:	Dynamic (room temperature): 30 mPa·s (30 cP) Kinematic (room temperature): 0.33 to 0.4 cm^2/s (33 to 40 cSt) Kinematic (40°C (104°F)): 0.17 to 0.22 cm^2/s (17 to 22 cSt)
Pour point	:	-6°C

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur. Not classified.
Conditions to avoid	:	This product, by reaction with air and without energy supply, is liable to self-heat and will ignite when in large amounts and after long periods of time. Materials such as rags used with this product may begin to burn by themselves.
Incompatible materials	:	No specific data. Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Species	Result	Dose
Organic acid.	-	Rabbit	LD50 Dermal	>2000 mg/kg -
	-	Rat	LD50 Oral	>10000 mg/kg -

Section 11. Toxicological information

Potential chronic health effects

Not available.

Irritation/Corrosion

Not available.

Conclusion/Summary

Skin : Prolonged and repeated contact may cause mild irritation

Eyes : May cause eye irritation.

Sensitization

Product/ingredient name	Test	Species	Result
Organic acid.	OECD 406 Skin Sensitization	Guinea pig	Not sensitizing -

Mutagenicity

Not available.

Carcinogenicity

Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Organic acid.	EC50 >10000 mg/l EL50 EC50 >10000 mg/l EL50 LC50 >10000 mg/l LL50	Algae Daphnia Fish	72 hours 48 hours 96 hours

Persistence and degradability

Product/ingredient name	Test	Result
Organic acid.	OECD 301E Ready Biodegradability - Modified OECD Screening Test OECD 301D Ready Biodegradability - Closed Bottle Test	74 % - Readily - 28 days 56 % - 28 days

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Organic acid.	-	-	Readily

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Organic acid.	>3	-	low

Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: This material is listed or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

California Prop. 65 CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer, birth defects or other reproductive harm.

International lists

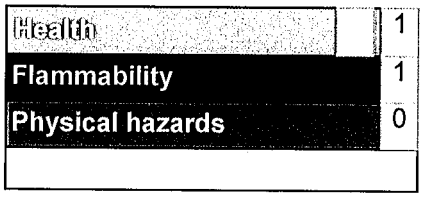
National inventory

Australia inventory (AICS)	: This material is listed or exempted.
Canada inventory	: This material is listed or exempted.
China inventory (IECSC)	: This material is listed or exempted.
Europe inventory	: This material is listed or exempted.
Japan inventory (ENCS)	: **Japan inventory (ENCS)**: This material is listed or exempted. **Japan inventory (ISHL)**: Not determined.
New Zealand Inventory of Chemicals (NZIoC)	: This material is listed or exempted.
Philippines inventory (PICCS)	: This material is listed or exempted.
Korea inventory (KECI)	: This material is listed or exempted.
Taiwan inventory (TCSI)	: This material is listed or exempted.
United States inventory (TSCA 8b)	: This material is listed or exempted.

Our REACH (pre-) registrations DO NOT cover the following:
1. The manufacture of these products by our company outside the EU unless covered by the Only Representative provisions, and
2. The importation of these products into Europe by other companies. Re-importation by other companies is not covered by our (pre-) registrations
Customers and other third parties importing and/or re-importing our products into Europe will need either:
- Their own (pre-) registration for substances contained in the imported product, or constituent monomers (imported above 1 tonne per year and >2% by weight) in the case of imported polymers, or
- In the case of importation only, to make use of the "Only Representative" provisions, if available.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

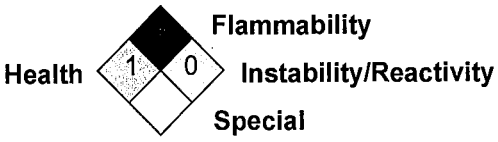


Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing	:	2018-03-23
Date of issue/Date of revision	:	2018-03-23
Date of previous issue	:	2018-03-23
Version	:	1.03
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

☑ **Indicates information that has changed from previously issued version.**

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Section 1. Identification

Product name : PFR2271 - Sulfuric Acid, 98%

Product code : PFR2271

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Not available.

Print date : 1/19/2023

Validation date : 1/19/2023

Version : 2.01

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
CARCINOGENICITY - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Causes severe skin burns and eye damage.
May cause respiratory irritation.
May cause cancer.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves: > 8 hours (breakthrough time): Butyl rubber gloves. 4H gloves.. Wear protective clothing. Wear eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling.

Section 2. Hazards identification

Response : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage : Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Additional information

Reacts violently with water. Contents may be under pressure of explosive, flammable hydrogen gas. Highly reactive and capable of igniting combustible material on contact.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Sulfuric acid	90 - 100	7664-93-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.

Inhalation : Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash affected area with soap and mild detergent for at least 20 - 60 minutes. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

Ingestion : Call a poison center or physician. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : May cause respiratory irritation.

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : respiratory tract irritation,coughing

Skin contact : pain or irritation,redness,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Additional information

Ingestion: If not already performed by first aid personnel, irrigate mouth with large amounts of water and dilute the acid by having the victim drink 4 to 8 ounces of water or milk. DO NOT induce vomiting. Use of gastric lavage is controversial. If a large amount (> 1 ml/kg body weight) has recently been ingested, cautious gastric lavage is generally advised if the patient is alert and there is little risk of convulsions.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : sulfur oxides

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Additional information

Neutralize acids by applying basic substances (soda ash or lime) or use an acid spill kit.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 49°C (120.2°F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Sulfuric acid	**ACGIH TLV (United States, 1/2022).** TWA: 0.2 mg/m³, 0 times per shift, 8 hours. Form: Thoracic fraction **NIOSH REL (United States, 10/2020).** TWA: 1 mg/m³, 0 times per shift, 10 hours. **OSHA PEL (United States, 5/2018).** TWA: 1 mg/m³, 0 times per shift, 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 1 mg/m³, 0 times per shift, 8 hours.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection : Chemical-resistant gloves: Butyl rubber gloves. 4H gloves.

Skin protection : Wear long sleeves and chemical resistant apron to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Oily liquid.]

Color : Colorless.

Odor : Odorless.

Odor threshold : Not available.

pH : 1 [Conc. (% w/w): 1%]

: 1% in water.

Melting point/freezing point : Not available.

Initial Boiling Point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Not available.

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Not available.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : Not available.

Relative density : 1.835 (20°C)

Density : 15.28 (lbs/gal)

Solubility in water : Miscible

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: reducing materials, combustible materials, organic materials, metals, alkalis and moisture.
Halogenated compounds. Heat is generated when product is mixed with water – spattering or boiling can occur.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
PFR2271 - Sulfuric Acid, 98%	LC50 Inhalation Vapor LD50 Oral	Rat Rat	347 ppm 2140 mg/kg	1 hours -
Sulfuric acid	LD50 Oral	Rat	2140 mg/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Sulfuric acid	-	1	Known to be a human carcinogen.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Sulfuric acid	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : May cause respiratory irritation.

Section 11. Toxicological information

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:,pain,watering,redness

Inhalation : respiratory tract irritation,coughing

Skin contact : pain or irritation,redness,blistering may occur

Ingestion : Adverse symptoms may include the following:,stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
PFR2271 - Sulfuric Acid, 98%	2140	Not available.	Not available.	Not available.	Not available.
Sulfuric acid	2140	Not available.	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Sulfuric acid	Acute LC50 42500 µg/l Marine water Acute LC50 42 ppm Fresh water	Crustaceans - Pandalus montagui Fish - Gambusia affinis	48 hours 96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Section 12. Ecological information

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1830	UN1830	UN1830	UN1830
UN proper shipping name	Sulfuric acid	Sulfuric acid	Sulfuric acid	Sulfuric acid
Transport hazard class(es)	8 	8 	8 	8 
Packing group	II	II	II	II
Environmental hazards	No.	No.	No.	No.

Additional information

DOT Classification : **Reportable quantity** 1020.4 lbs / 463.27 kg [66.693 gal / 252.46 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8).

IMDG : **Emergency schedules** F-A S-B

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Sulfuric acid, 67 gal of this product.

Section 14. Transport information

Marine pollutant Not available.

North-America NAERG : 137

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: sulphuric acid

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Sulfuric acid	90 - 100	Yes.	1000	66.3	1000	66.3

SARA 311/312

Classification : SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
CARCINOGENICITY - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SARA 313

	Product name	CAS number	%
Supplier notification	Sulfuric acid	7664-93-9	90 - 100

California Prop. 65

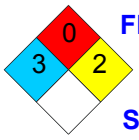
⚠ **WARNING**: This product can expose you to Sulfuric acid, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



History

Date of printing : 1/19/2023

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET

1. Identification

Product identifier **PHOSPHORIC ACID 85%**

Other means of identification None.

Recommended use ALL PROPER AND LEGAL PURPOSES

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Spectrum Water Technology

Address 6135 Industrial Drive
Geismar, LA 70734

Telephone 225-647-3565

Website www.spectrumwater.com

Emergency phone number 800-424-9300 CCN726304 CHEMTREC

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 1A

Serious eye damage/eye irritation Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement

Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
PHOSPHORIC ACID		7664-38-2	85.5
Other components below reportable levels			14.5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
PHOSPHORIC ACID (CAS 7664-38-2)	PEL	1 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
PHOSPHORIC ACID (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
PHOSPHORIC ACID (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color CLEAR COLORLESS

Odor NONE

Odor threshold Not available.

pH Not available.

Melting point/freezing point 70 °F (21.11 °C)

Initial boiling point and boiling range 385.91 °F (196.62 °C) estimated

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	14.08 lbs/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	14.5 % estimated
Specific gravity	1.69

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity	Not available.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1805
UN proper shipping name	PHOSPHORIC ACID SOLUTION
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	154

DOT information on packaging may be different from that listed.

DOT

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

PHOSPHORIC ACID (CAS 7664-38-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

PHOSPHORIC ACID (CAS 7664-38-2) High priority

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

PHOSPHORIC ACID (CAS 7664-38-2)

US. Massachusetts RTK - Substance List

PHOSPHORIC ACID (CAS 7664-38-2)

US. New Jersey Worker and Community Right-to-Know Act

PHOSPHORIC ACID (CAS 7664-38-2)

US. Pennsylvania Worker and Community Right-to-Know Law

PHOSPHORIC ACID (CAS 7664-38-2)

US. Rhode Island RTK

PHOSPHORIC ACID (CAS 7664-38-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 03-26-2015

Revision date 02-25-2016

Version # 18

HMIS® ratings
Health: 3
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 3
Flammability: 0
Instability: 0

Disclaimer
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VEOLIA

SAFETY DATA SHEET
SOLUS AP25

1. Identification

Product identifier **SOLUS AP25**

Other means of identification None.

Recommended use Internal boiler water treatment

Recommended restrictions None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.

Disposal Dispose of contents/container to an approved facility.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Sodium hydroxide	1310-73-2	2.5 - 10

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should give oxygen. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Take off contaminated clothing and wash before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Do not feed anything by mouth to an unconscious or convulsive victim. Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Corrosive liquid.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Never return spills to original containers for re-use.

Environmental precautions Avoid discharge into drains, water courses or onto the ground. Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.

7. Handling and storage

Precautions for safe handling Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Do not freeze. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid

Physical state Liquid.

Form Not available.

Color Amber

Odor Slight ammonia odor

Odor threshold Not available.

pH (concentrated product) > 13 Neat

Melting point/freezing point 14 °F (-10 °C)

Initial boiling point and boiling range 219 °F (104 °C)

Flash point Not Applicable

Evaporation rate Slower than Ether

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.16
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	11 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	> 13 (5% Solution)
Pour point	19 °F (-7 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	May be corrosive to metals.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials. Protect from freezing.
Incompatible materials	Strong acids. Metals.
Hazardous decomposition products	Oxides of carbon, nitrogen, phosphorus, and sulphur evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

Product	Species	Test Results
SOLUS AP25		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Inhalation		
LC50	Rat	> 20 mg/l, 4 Hour (Calculated according to GHS additivity formula)

Product	Species	Test Results
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Dermal		
LD50	Rabbit	1350 mg/kg
Oral		
LD50	Rabbit	> 500 mg/kg

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Based on available data, the classification criteria are not met. Aspiration of this product may cause the same corrosiveness/irritation impacts as if it were ingested.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	2836 mg/l, 48 hour (pH adjusted)
	NOEL	Daphnia magna	625 mg/l, 48 hour (pH adjusted)
Fish	LC50	Fathead Minnow	> 5000 mg/l, 96 hour (pH adjusted)
		Rainbow Trout	> 5000 mg/l, 96 hour (pH adjusted)
	NOEL	Fathead Minnow	5000 mg/l, 96 hour (pH adjusted)
		Rainbow Trout	5000 mg/l, 96 hour (pH adjusted)

Persistence and degradability

Bioaccumulative potential

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Incinerate the material under controlled conditions in an approved incinerator.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1824
UN proper shipping name	Sodium hydroxide solution, RQ(Sodium hydroxide)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Special precautions for user	Not available.
ERG number	154

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN1824
UN proper shipping name	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	No
Special precautions for user	Not available.

Some containers may not be approved under IATA, please check BOL for exact container classification.

IMDG

UN number	UN1824
UN proper shipping name	SODIUM HYDROXIDE SOLUTION, RQ(Sodium hydroxide)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Not available.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sodium hydroxide (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Corrosive to metal
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration ALL ingredients in this product are authorized in 21CFR173.310 for use as boiler water additives where the steam may contact food.
The maximum level of Solus AP25 permitted in the boiler water where steam contacts food is 625 ppm.

NSF Registered and/or meets USDA (according to 1998 guidelines): Registration No. – 152248
Category Code(s):
G5 Cooling and retort water treatment products
G6 Boiler treatment products, steam line products – food contact

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Sodium hydroxide (CAS 1310-73-2)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Jan-07-2015
Revision date	Feb-19-2023
Version #	7.1
NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	
List of abbreviations	CAS: Chemical Abstract Service Registration Number ACGIH: American Conference of Governmental Industrial Hygienists NOEL: No Observed Effect Level STEL: Short Term Exposure Limit LC50: Lethal Concentration, 50% TWA: Time Weighted Average BOD: Biochemical Oxygen Demand COD: Chemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code LD50: Lethal Dose, 50% TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

SAFETY DATA SHEET

Section 1. Identification

Product name : SPECTRACLEAR™ 509

™ a trademark of Baker Hughes Incorporated.

Product code : SCL509

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Water clarifier.

Print date : 3/21/2023

Validation date : 10/25/2022

Version : 1

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Aluminum chloride hydroxide	20 - 30	12042-91-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : halogenated compounds,metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Aluminum chloride hydroxide	**NIOSH REL (United States, 10/2020). Notes: as Al** TWA: 2 mg/m³, (as Al), 0 times per shift, 10 hours. **OSHA PEL 1989 (United States, 3/1989). Notes: as Al** TWA: 2 mg/m³, (as Al), 0 times per shift, 8 hours.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Hazy.]

Color : Amber. [Light]

Odor : Mild.

Odor threshold : Not available.

pH : 2.5 to 4

Melting point/freezing point : Not available.

Initial Boiling Point : Not available.

Section 9. Physical and chemical properties

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Not available.

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Not available.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : Not available.

Relative density : 1.2 (15.6°C)

Density : 10.019 (lbs/gal)

Solubility in water : Soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, metals and alkalis.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Aluminum chloride hydroxide	LD50 Dermal LD50 Oral	Rabbit Rat	>2000 mg/kg 9187 mg/kg	- -

Irritation/Corrosion

Section 11. Toxicological information

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

No available toxicity data.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Section 11. Toxicological information

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Aluminum chloride hydroxide	9187	2500	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
SPECTRACLEAR™ 509	Acute EC50 397 mg/l Acute LC50 609 mg/l	Daphnia Fish	48 hours 96 hours
Aluminum chloride hydroxide	Acute LC50 100 to 500 mg/l	Fish	48 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Not applicable.

Marine pollutant Not available.

North-America NAERG : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.
TSCA 12(b) annual export notification: No products were found.
United States inventory (TSCA 8b): All components are active or exempted.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : Not applicable.

SARA 313

Supplier notification : No products were found.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)

History

Date of printing : 3/21/2023

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET

Section 1. Identification

Product name : SpectraFloc™ 650M FLOCCULANT
™ a trademark of Baker Hughes Incorporated.

Product code : SPC650M

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Flocculant.

Print date : 1/9/2023

Validation date : 1/9/2023

Version : 2.01

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Additional information

Product forms slippery surface when combined with water.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Petroleum distillates	20 - 30	64742-47-8
Alkoxylated alcohol	1 - 5	Trade secret.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Additional information

Section 4. First aid measures

If product is ingested and vomiting occurs naturally, have person lean forward to reduce the risk of aspiration into the lungs.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,nitrogen oxides,halogenated compounds

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Additional information

Spilled material becomes very slippery when wet. Sweep up spills and place in a waste disposal container. Flush the area thoroughly with water and scrub to remove residue. If area is still slippery, apply dry absorbent compound and sweep up the mixture and place in a waster disposal container. Do not flush large quantities of the material to the sewer.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Petroleum distillates	**ACGIH TLV (United States, 1/2022). Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.
Alkoxylated alcohol	None.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves: Nitrile or Neoprene gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Viscous.]

Color : Milky.

Odor : Aliphatic solvent.

Odor threshold : Not available.

pH : 4 to 7 [Conc. (% w/w): 5%]

: 5 g/L

Melting point/freezing point : Not available.

Initial Boiling Point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Not available.

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : <1 [Air = 1]

Relative density : 1.04 (15.6°C)

Density : 8.6632 (lbs/gal)

Solubility in water : Slight

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Section 10. Stability and reactivity

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
SpectraFloc™ 650M FLOCCULANT	LD50 Oral	Rat	>5000 mg/kg	-
Petroleum distillates	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

No available toxicity data.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Name	Result
Petroleum distillates	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Section 11. Toxicological information

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Alkoxylated alcohol	500	Not available.	Not available.	Not available.	Not available.

Additional information

This product contains trace quantities of acrylamide monomer. Acrylamide has been identified as a suspected cancer agent by the National Toxicology Program (NTP) and/or by the International Agency for Research on Cancer (IARC).

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Petroleum distillates	Acute LC50 2200 µg/l Fresh water Acute LC50 2900 µg/l Fresh water	Fish - Lepomis macrochirus Fish - Oncorhynchus mykiss	4 days 96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Alkoxylated alcohol	-	232.5	low

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Not applicable.

Marine pollutant Not available.

North-America NAERG : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: adipic acid

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : Not applicable.

SARA 313

Supplier notification : No products were found.

California Prop. 65

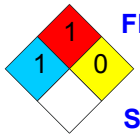
⚠ **WARNING**: This product can expose you to Trade secret., which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



Flammability

Health **Instability**

Special

History

Date of printing : 1/9/2023

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or

Section 16. Other information

disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET

Section 1. Identification

Product name : SPECTRAFLOC® 680
® a trademark of Baker Hughes, Inc.

Product code : SPC680

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Additive

Print date : 4/23/2024

Validation date : 4/23/2024

Version : 4

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Mixing of chemicals may create a reaction hazardous to one’s health, to the environment, or a potential fire hazard.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Petroleum distillates	20 - 30	64742-47-8
Alkoxylated alcohol	1 - 5	Trade secret.
Adipic acid	1 - 5	124-04-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,nitrogen oxides,halogenated compounds

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Petroleum distillates	**ACGIH TLV (United States, 7/2023). [Kerosene]** **Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.
Alkoxylated alcohol	None.
Adipic acid	**ACGIH TLV (United States, 7/2023).** TWA: 5 mg/m³, 0 times per shift, 8 hours. **CAL OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves: Nitrile or Neoprene gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Opaque.]

Color : Milky-white.

Odor : Aliphatic [Slight]

Odor threshold : Not available.

pH : 5 to 7

: 5 g/L

Melting point/freezing point : Not available.

Initial Boiling Point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Closed cup: >93.4°C (>200.1°F) [PMCC]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : <1 [Air = 1]

Relative density : 1.04 (15.6°C)

Density : 8.66 (lbs/gal)

Solubility in water : Slight

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Petroleum distillates	LD50 Oral	Rat	>5000 mg/kg	-
Adipic acid	LD50 Dermal	Rabbit	>7940 mg/kg	-
	LD50 Oral	Rat	5050 mg/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

No available toxicity data.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Name	Result
Petroleum distillates	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Section 11. Toxicological information

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SPECTRAFLOC® 680	20000	Not available.	Not available.	Not available.	Not available.
Alkoxylated alcohol	500	Not available.	Not available.	Not available.	Not available.
Adipic acid	5050	Not available.	Not available.	Not available.	Not available.

Additional information

This product contains trace quantities of acrylamide monomer. Acrylamide has been identified as a suspected cancer agent by the National Toxicology Program (NTP) and/or by the International Agency for Research on Cancer (IARC). Acrylamide is also a chemical known to the State of California to cause cancer under Proposition 65.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Petroleum distillates	Acute LC50 2200 µg/l Fresh water Acute LC50 2900 µg/l Fresh water	Fish - *Lepomis macrochirus* Fish - *Oncorhynchus mykiss*	4 days 96 hours
Adipic acid	Acute LC50 >300 mg/l Acute LC50 97 mg/l	Fish Fish	1 hours 96 hours

Persistence and degradability

Not available.

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Alkoxylated alcohol	-	232.5	Low
Adipic acid	0.093	3.162	Low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Not applicable.

Marine pollutant Not available.

Section 14. Transport information

North-America NAERG : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: adipic acid

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : Not applicable.

SARA 313

Supplier notification : No products were found.

California Prop. 65

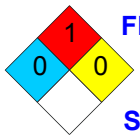
⚠ **WARNING**: This product can expose you to Trade secret., which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



History

Date of printing : 4/23/2024

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET

Section 1. Identification

Product name : SpectraFloc® 875
® a trademark of Baker Hughes, Inc.

Product code : SPC875

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Water clarifier.

Print date : 4/12/2024

Validation date : 4/12/2024

Version : 3

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Mixing of chemicals may create a reaction hazardous to one’s health, to the environment, or a potential fire hazard.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Petroleum distillates	20 - 30	64742-47-8
Alkoxylated alcohol	1 - 5	Trade secret.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,nitrogen oxides,metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Additional information

Spills of this product are very slippery. Spilled material should be absorbed onto an inert material and scooped up. The area should be thoroughly flushed with water and washed to remove residue. If area is still slippery, apply more dry-sweeping compound.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Petroleum distillates	**ACGIH TLV (United States, 7/2023). [Kerosene] Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.
Alkoxylated alcohol	None.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Opaque.]

Color : White.

Odor : Aliphatic hydrocarbon.

Odor threshold : Not available.

pH : 5 to 8

: 5 g/L

Melting point/freezing point : 0°C (32°F)

Initial Boiling Point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : Closed cup: >93.4°C (>200.1°F) [SFCC]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : >1 [Air = 1]

Relative density : 1.05 (15.6°C)

Density : 8.75 (lbs/gal)

Solubility in water : Soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic: 1200 cP

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
SpectraFloc® 875	LD50 Oral	Rat	5000 mg/kg	-
Petroleum distillates	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

No available toxicity data.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Name	Result
Petroleum distillates	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Section 11. Toxicological information

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SpectraFloc® 875	5000	Not available.	Not available.	Not available.	Not available.
Alkoxylated alcohol	500	Not available.	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
SpectraFloc® 875	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute IC50 >100 mg/l	Algae	72 hours
	Acute LC50 >100 mg/l	Fish	96 hours
Petroleum distillates	Acute LC50 2200 µg/l Fresh water	Fish - *Lepomis macrochirus*	4 days
	Acute LC50 2900 µg/l Fresh water	Fish - *Oncorhynchus mykiss*	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Alkoxylated alcohol	-	232.5	Low

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Not applicable.

Marine pollutant Not available.

North-America NAERG : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.

TSCA 12(b) annual export notification: No products were found.

United States inventory (TSCA 8b): All components are active or exempted.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : Not applicable.

SARA 313

Supplier notification : No products were found.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)

History

Date of printing : 4/12/2024

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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Section 16. Other information

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

SAFETY DATA SHEET
SPECTRUS* BD1501E

1. Identification

Product identifier **SPECTRUS BD1501E**

Other means of identification None.

Recommended use Biodispersant

Recommended restrictions Industrial use only.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves. Wear eye/face protection.

Response IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Alcohols, C10, alkoxylated	166736-08-9	10 - 20

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may be necessary. Call a POISON CENTER or doctor/physician if you feel unwell. If nasal, throat or lung irritation develops - remove to fresh air and get medical attention.

Skin contact Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Ventilate area, use specified protective equipment. Flush area with water. Wet area may be slippery.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not get this material in contact with eyes. Avoid contact with skin. Avoid contact with clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in cool, well ventilated area. Store away from oxidizers.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Eye wash facilities and emergency shower must be available when handling this product. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection	
Hand protection	Chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Impervious gloves. Wash off after each use. Replace as necessary.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary. Not applicable.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Not available.
Color	Colorless
Odor	Mild
Odor threshold	Not available.
pH (concentrated product)	6.7 Neat
Melting point/freezing point	31 °F (-1 °C)
Initial boiling point and boiling range	219 °F (104 °C)
Flash point	> 199 °F (> 93 °C) P-M(CC)
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	1.02
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	70 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
Pour point	36 °F (2 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Not available.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.
Conditions to avoid	Avoid contact with strong oxidizers. Protect from freezing.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Oxides of carbon evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye damage.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

Product	Species	Test Results
SPECTRUS BD1501E		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	3570 mg/kg (Calculated according to GHS additivity formula (Category 5))

Components	Species	Test Results
Alcohols, C10, alkoxylated (CAS 166736-08-9)		
Acute		
Oral		
LD50	Rat	500 - 2000 mg/kg

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	
Respiratory sensitization	This product is not expected to cause respiratory sensitization. Not a respiratory sensitizer.
Skin sensitization	Not available.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard. Based on available data, the classification criteria are not met.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	IC25	Ceriodaphnia	39.9 mg/l, 7 day
	LC50	Ceriodaphnia	200 mg/l, 48 hour
		Daphnia magna	38.2 mg/l, 48 hour
	NOEL	Ceriodaphnia	100 mg/l, 48 hour
			25 mg/l, 7 day
		Daphnia magna	12.5 mg/l, 48 hour
Fish	LC50	Fathead Minnow	82.5 mg/l, 96 hour
		Rainbow Trout	141.4 mg/l, 96 hour
	NOEL	Fathead Minnow	31.3 mg/l, 96 hour
		Rainbow Trout	100 mg/l, 96 hour

Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

NSF Registered and/or meets USDA (according to 1998 guidelines):
Registration No. – 141060
Category Code(s):
G5 Cooling and retort water treatment products
G7 Boiler, steam line treatment products – nonfood contact

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Oct-27-2014
Revision date	Feb-19-2023
Version #	3.1
NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	
List of abbreviations	CAS: Chemical Abstract Service Registration Number TWA: Time Weighted Average STEL: Short Term Exposure Limit LD50: Lethal Dose, 50% LC50: Lethal Concentration, 50% NOEL: No Observed Effect Level COD: Chemical Oxygen Demand BOD: Biochemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code NFPA: National Fire Protection Association ACGIH: American Conference of Governmental Industrial Hygienists GHS: Globally Harmonized System of Classification and Labeling of Chemicals. DOT: Department of Transportation (49 CFR 172.101). IARC: International Agency for Research on Cancer. OSHA: Occupational Safety & Health Administration. TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

* Trademark of Veolia. May be registered in one or more countries.

SAFETY DATA SHEET
SPECTRUS* NX1100

1. Identification

Product identifier **SPECTRUS NX1100**

Other means of identification None.

Recommended use Biocide

Recommended restrictions None known.

Company/undertaking identification

SUEZ WTS USA, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May be corrosive to metals. Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention Wear eye/face protection. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. Wash hands thoroughly after handling. Keep only in original container. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
2-Bromo-2-nitropropane-1,3-diol (Bronopol)	52-51-7	2.5 - 10
Magnesium nitrate	10377-60-3	2.5 - 10
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one	55965-84-9	2.5 - 10
Magnesium chloride	7786-30-3	1 - 2.5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments	Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Do not induce vomiting. Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage. The dilution with water or milk is appropriate if there has been no vomiting (120 to 240 ml for adults, do not exceed 120 ml for children). If swallowed, assess endoscopy results. Contraindication: neutralization and activated Carbon. Symptomatic treatment.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In case of fire and/or explosion do not breathe fumes. Cool containers / tanks with water spray.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water. Apply solution to the spill area at a ratio of 10 volumes deactivation solution per estimated volume of residual spill to deactivate any residual active ingredient.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Prevent from entering sewers or the immediate environment.

7. Handling and storage

Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Corrosive liquid. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Store in a well-ventilated place. Keep container tightly closed in a dry and well-ventilated place. Store at temperatures below 35°C Use approved containers only. Protect from freezing. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Color

Colorless to yellow green

Physical state

Liquid

Odor

None

Odor threshold

Not available.

pH (concentrated product)	3
pH in aqueous solution	3.7 (5% SOL.)
Melting point/freezing point	24 °F (-4 °C)
Initial boiling point and boiling range	220 °F (104 °C)
Flash point	Not applicable.
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1 (Air = 1)
Relative density	1.11
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	10 cps
Viscosity temperature	70 °F (21 °C)
Other information	
Pour point	29 °F (-2 °C)
Specific gravity	1.107
VOC	0 %

10. Stability and reactivity

Reactivity	May be corrosive to metals.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hydrogen bromide, bromine gas, hydrogen chloride, chlorine gas, oxides of carbon and nitrogen evolved in fire. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled. May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity Harmful if swallowed. Harmful if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.

Product	Species	Test Results
SPECTRUS NX1100 (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 1 mg/l, 4 Hour
Oral		
LD50	Rat	1030 mg/kg

Components	Species	Test Results
2-Bromo-2-nitropropane-1,3-diol (Bronopol) (CAS 52-51-7)		
Acute		
Dermal		
LD50	Rat	1600 mg/kg
Inhalation		
LC50	Rat	> 0.59 mg/l, 4 Hour, (Aerosol toxicity)
Oral		
LD50	Rat	324 mg/kg
Magnesium chloride (CAS 7786-30-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Magnesium nitrate (CAS 10377-60-3)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	5400 mg/kg
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (CAS 55965-84-9)		
Acute		
Dermal		
LD50	Rabbit	90 mg/kg
Inhalation		
LC50	Rat	0.33 mg/l, 4 Hour
Oral		
LD50	Rat	67 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin burns.

Serious eye damage/eye irritation Corrosive to eyes. Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Based on available data, the classification criteria are not met. Aspiration of this product may cause the same corrosiveness/irritation impacts as if it were ingested.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
SPECTRUS NX1100 (CAS Mixture)			
Aquatic			
Crustacea	LC50	Ceriodaphnia	4.7 mg/l, Static Renewal Bioassay, 48 hour
		Daphnia magna	5 mg/l, Static Renewal Bioassay, 48 hour
		Mysid Shrimp	40.5 mg/l, Static Renewal Bioassay, 48 hour
	NOEL	Ceriodaphnia	0.63 mg/l, Static Renewal Bioassay, 48 hour
		Daphnia magna	2.5 mg/l, Static Renewal Bioassay, 48 hour
		Mysid Shrimp	18 mg/l, Static Renewal Bioassay, 48 hour
Fish	LC50	Fathead Minnow	3.5 mg/l, Static Renewal Bioassay, 96 hour
		Menidia beryllina (Silversides)	15.9 mg/l, Static Renewal Bioassay, 96 hour
		Rainbow Trout	7.2 mg/l, Static Renewal Bioassay, 96 hour
		Sheepshead Minnow	26.7 mg/l, Static Renewal Bioassay, 96 hour
	NOEL	Fathead Minnow	1.8 mg/l, Static Renewal Bioassay, 96 hour
		Menidia beryllina (Silversides)	12.5 mg/l, Static Renewal Bioassay, 96 hour
		Rainbow Trout	3.1 mg/l, Static Renewal Bioassay, 96 hour
		Sheepshead Minnow	15.5 mg/l, Static Renewal Bioassay, 96 hour

Components		Species	Test Results
2-Bromo-2-nitropropane-1,3-diol (Bronopol) (CAS 52-51-7)			
	EC50	Daphnia Magna	1.4 mg/l, 48 hour
Aquatic			
Fish	LC50	Rainbow Trout	41 mg/l, 96 hour

Bioaccumulative potential Not bioaccumulating (Refers to active component) 2-Bromo-2-nitropropane-1,3-diol

Partition coefficient n-octanol / water (log Kow)

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one	0.49

Mobility in soil No data available.

Other adverse effects	Nutrients: N = 8.03 mg/g
Persistence and degradability	
- COD (mgO2/g)	77
- BOD 5 (mgO2/g)	2 (calculated data)
- BOD 28 (mgO2/g)	4 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	2 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days)	8 (calculated data)
- TOC (mg C/g)	29 (calculated data)

13. Disposal considerations

Disposal instructions	Dispose of in approved pesticide facility or according to label instructions. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Incinerate the material under controlled conditions in an approved incinerator.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company. D002= Corrosive
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Dispose of in approved pesticide facility or according to label instructions. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (2-BROMO-2-NITROPROPANE-1,3-DIOL, 5-Chloro-2-Methyl-4-Isothiazolin-3-One Mixture With 2-Methyl-4-Isothiazolin-3-One)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Special precautions for user	Not available.
ERG number	153

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (mixture of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one, 2-bromo-2-nitropropane-1,3-diol)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	Yes
Special precautions for user	Not available.

IMDG

UN number	UN3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (mixture of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one, 2-bromo-2-nitropropane-1,3-diol), MARINE POLLUTANT
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	Not available.
Special precautions for user	Not available.

DOT

IATA; IMDG

Marine pollutant

15. Regulatory information

US federal regulations

This is an EPA registered biocide and is exempt from TSCA inventory requirements. See FIFRA registry number. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Corrosive to metal
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Magnesium nitrate	10377-60-3	2.5 - 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Sulphuric acid (CAS 7664-93-9)

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)	Hazardous substance
Safe Drinking Water Act (SDWA)	Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

FIFRA registration number	3876-151
TSCA	This is an EPA registered biocide and is exempt from TSCA inventory requirements.
FIFRA hazard statement	This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label: DANGER Corrosive Causes irreversible eye damage Causes skin burns Harmful if swallowed or absorbed through the skin Harmful if inhaled Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals This pesticide is toxic to fish and aquatic organisms
Food and drug administration	21 CFR 176.300 & 176.170 (slimicides and as a preservative)
NSF Registered and/or meets USDA (according to 1998 guidelines):	Registration No. – 141064 Category Code(s): G5 Cooling and retort water treatment products G7 Boiler, steam line treatment products – nonfood contact

US state regulations

US. California Proposition 65

WARNING: This product can expose you to Sulphuric acid, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Sulphuric acid (CAS 7664-93-9) Listed: March 14, 2003

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Jul-03-2014
Revision date	Aug-02-2019
Version #	1.1
NFPA ratings	Health: 3 Flammability: 0 Instability: 0

NFPA ratings

List of abbreviations

CAS: Chemical Abstract Service Registration Number
ACGIH: American Conference of Governmental Industrial Hygienists
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
EC50: Effect Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

References:

CNS 15030
UN Transportation Regulations Safety data sheets of raw materials.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information

Hazard(s) identification: Prevention
Hazard(s) identification: Response
Physical & Chemical Properties: Multiple Properties
GHS: Classification

Prepared by

This SDS has been prepared by SUEZ Regulatory Department (1-215-355-3300).

SAFETY DATA SHEET
SPECTRUS* NX1106

1. Identification

Product identifier **SPECTRUS NX1106**

Other means of identification None.

Recommended use Water-based microbial control agent.

Recommended restrictions None known.

Company/undertaking identification

SUEZ WTS USA, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Sensitization, skin	Category 1
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container to an approved facility.

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Magnesium nitrate	10377-60-3	1 - 2.5
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one	55965-84-9	1 - 2.5

Composition comments	Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Rinse immediately with plenty of water for at least 20 minutes Remove contact lenses, if present and easy to do. Keep eyelids apart. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	If ingestion of a large amount does occur, call a poison control center immediately. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed. Corrosive material Possible mucosal damage may contraindicate the use of gastric lavage. It may not be advisable to induce vomiting.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. Corrosive liquid.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up	Absorb the spill with spill pillows or inert solids such as clay or vermiculite. Transfer contaminated materials to suitable containers for disposal. Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water. Apply solution to the spill area at a ratio of 10 volumes deactivation solution per estimated volume of residual spill to deactivate any residual active ingredient. Let stand for 30 minutes. Flush the spill area with copious amounts of water to chemical sewer in accordance with local procedures, permits and regulations. DO NOT add deactivation solution to the waste pail to deactivate the adsorbed material.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.

7. Handling and storage

Precautions for safe handling	Avoid all contact with reducing agents, oils, greases, organics and acids. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store upright in original vented container. Product evolves carbon dioxide gas slowly. Store samples in plastic bottles only. Store in accordance with local/regional/national/international regulation.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Eye wash facilities and emergency shower must be available when handling this product. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection	
Hand protection	Chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	
Color	Yellow to blue-green
Physical state	Liquid
Odor	Slight
Odor threshold	Not available.
pH (concentrated product)	3
pH in aqueous solution	4 (5% SOL.)
Melting point/freezing point	28 °F (-2 °C)
Initial boiling point and boiling range	220 °F (104 °C)
Flash point	Not applicable.
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mm Hg / 2.4 kPa
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1 (Air = 1)
Relative density	1.03
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	8 cps
Viscosity temperature	70 °F (21 °C)
Other information	
Pour point	33 °F (1 °C)
Specific gravity	1.033
VOC	0 % (Calculated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials. None under normal conditions.
Incompatible materials	Strong oxidizing agents. Reducing agents. Amines. mercaptans
Hazardous decomposition products	Oxides of carbon, nitrogen, and sulphur evolved in fire. Hydrogen chloride.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity	Causes severe skin burns and eye damage. May cause respiratory irritation. May cause an allergic skin reaction.

Product	Species	Test Results
SPECTRUS NX1106 (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg

Product	Species	Test Results
Inhalation		
LC50	Rat	> 5 mg/l, 4 Hours
Oral		
LD50	Rat	4468 mg/kg

Components	Species	Test Results
Magnesium nitrate (CAS 10377-60-3)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	5400 mg/kg
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (CAS 55965-84-9)		
Acute		
Dermal		
LD50	Rabbit	90 mg/kg
Inhalation		
LC50	Rat	0.33 mg/l, 4 Hour
Oral		
LD50	Rat	67 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin burns.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Not classified.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Based on available data, the classification criteria are not met.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
SPECTRUS NX1106 (CAS Mixture)			
	LC50	Bluegill Sunfish	12.1 mg/L, Static Acute Bioassay, 96 hour
		Fathead Minnow	6.6 mg/L, Flow-Thru Bioassay, 96 hour
		Sheepshead Minnow	20 mg/L, Static Acute Bioassay, 96 hour
	LOEC	Fathead Minnow	4 mg/L, Early Life Stage Test, 36 day
	NOEL	Bluegill Sunfish	6.5 mg/L, Static Acute Bioassay, 96 hour

Product		Species	Test Results
		Fathead Minnow	2.5 mg/L, Flow-Thru Bioassay, 96 hour
			1.3 mg/L, Early Life Stage Test, 36 day
		Sheepshead Minnow	12 mg/L, Static Acute Bioassay, 96 hour
Aquatic			
Crustacea	10% Mortality	Daphnia magna	0.6 mg/L, Flow-Thru Bioassay, 48 hour
	LC50	Daphnia magna	2.9 mg/L, Flow-Thru Bioassay, 48 hour
Fish	LC50	Rainbow Trout	8.7 mg/L, Static Acute Bioassay, 96 hour
			4.6 mg/L, Chronic Bioassay, 14 day
	NOEL	Rainbow Trout	6.5 mg/L, Static Acute Bioassay, 96 hour
			3.3 mg/L, Chronic Bioassay, 14 day

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one	0.49

Mobility in soil No data available.

Other adverse effects Not available.

Persistence and degradability

- COD (mgO2/g)	17 (calculated data)
- BOD 5 (mgO2/g)	0 (calculated data)
- BOD 28 (mgO2/g)	0 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	0 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days)	0 (calculated data)
- TOC (mg C/g)	6 (calculated data)

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of in approved pesticide facility or according to label instructions.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company. D002= Corrosive

Waste from residues / unused products Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN3265

UN proper shipping name Corrosive liquid, acidic, organic, n.o.s. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group II

Special precautions for user Not available.

ERG number 153

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	Yes
ERG Code	153
Special precautions for user	Not available.

IMDG

UN number	UN3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE), MARINE POLLUTANT
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-B
Special precautions for user	Not available.

DOT

IATA; IMDG

Marine pollutant

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
This is an EPA registered biocide and is exempt from TSCA inventory requirements. See FIFRA registry number.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Magnesium nitrate	10377-60-3	1 - 2.5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

Safe Drinking Water Act (SDWA) Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

FIFRA registration number 3876-143

TSCA This is an EPA registered biocide and is exempt from TSCA inventory requirements.

FIFRA hazard statement This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER
Corrosive
Causes irreversible eye damage and skin burns
May be fatal if absorbed through skin
Harmful if swallowed
Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals
This chemical is toxic to terrestrial and aquatic plants, fish and aquatic invertebrates

Food and drug administration The ingredients in this product are approved by FDA under 21 CFR 176.300.

NSF Registered and/or meets USDA (according to 1998 guidelines):

Registration No. – 144533
Category Code(s):
G5 Cooling and retort water treatment products
G7 Boiler, steam line treatment products – nonfood contact

US state regulations

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Dec-12-2014

Revision date Jan-25-2019

Version # 4.0

NFPA ratings Health: 3
Flammability: 0
Instability: 0

NFPA ratings

List of abbreviations

CAS: Chemical Abstract Service Registration Number
ACGIH: American Conference of Governmental Industrial Hygienists
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

References: No data available

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information

Product and Company Identification: Commercial Names
Composition / Information on Ingredients: Disclosure Overrides
Composition/information on ingredients: Composition comments
Exposure controls/personal protection: Appropriate engineering controls
Physical & Chemical Properties: Multiple Properties
Transport Information: Agency Name, Packaging Type, and Transport Mode Selection
Regulatory information: California Prop 65
HazReg Data: Europe - EU
GHS: Classification

Prepared by This SDS has been prepared by SUEZ Regulatory Department (1-215-355-3300).

SAFETY DATA SHEET
SPECTRUS* OX103

1. Identification

Product identifier **SPECTRUS OX103**

Other means of identification None.

Recommended use Biocide

Recommended restrictions None known.

Company/undertaking identification

SUEZ WTS USA, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Oxidizing solids	Category 3
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1B
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Harmful if swallowed. May intensify fire; oxidizer. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. In case of fire: Use appropriate media for extinction.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Bromo-chloro, 5,5-dimethyl hydantoin	32718-18-6	90 - 100

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Rinse mouth with water. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Greatly increases the burning rate of combustible materials. Containers may explode when heated. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers exposed to flames with water until well after the fire is out.

General fire hazards May intensify fire; oxidizer. Contact with combustible material may cause fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up	Isolate spill by diking. Contain and recover by physical means. Product releases chlorine when wet. Spill residue may be neutralized with 3 % hydrogen peroxide solution. Contain and absorb on absorbent material. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop the flow of material, if this is without risk. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid all contact with reducing agents, oils, greases, organics and acids. Avoid contact with skin and eyes. Oxidizer. Keep away from heat. Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Take any precaution to avoid mixing with combustibles. Do not breathe dust. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Do not get this material on clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Do not store near combustible materials. Keep away from heat, sparks and other sources of ignition. Store locked up. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place.

8. Exposure controls/personal protection

Occupational exposure limits	This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	Splash proof chemical goggles. Face shield.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Suitable gloves can be recommended by the glove supplier. Glove selection must take into account any solvents and other hazards present. Frequent change is advisable.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Chemical resistant gloves.
Respiratory protection	Dust & vapor respirator. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	
Color	White to off-white
Physical state	Tablets
Odor	Halogen
Odor threshold	Not available.
pH in aqueous solution	4.7 (5% Dispersion)

Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not applicable.
Evaporation rate	Slower than Ether
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 1 mmHg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1
Relative density	Not available.
Solubility(ies)	
Solubility (water)	0.15 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	Greatly increases the burning rate of combustible materials.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous reactions may occur if this material gets inadvertently in contact with incompatible materials.
Conditions to avoid	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Moisture. Store in a dry place. Keep away from heat. Avoid contact with strong acids.
Incompatible materials	May react with alkalies, acids, organics or reducing agents. Do not contaminate. Slowly releases halogen gases when contaminated with moisture. Avoid contact with strong bases. Avoid contact with strong reducing agents.
Hazardous decomposition products	Contact with acids liberates toxic bromine and chlorine gas. Hydrogen bromide, bromine gas, hydrogen chloride, chlorine gas, oxides of carbon and nitrogen evolved in fire. Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage. Dust in the eyes will cause irritation.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity	Harmful if swallowed. May cause respiratory irritation. May cause an allergic skin reaction.

Product	Species	Test Results
SPECTRUS OX103 (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	578 mg/kg

Components	Species	Test Results
Bromo-chloro, 5,5-dimethyl hydantoin (CAS 32718-18-6)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin burns.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not likely, due to the form of the product.

Chronic effects Repeated skin contact may cause sensitization.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
SPECTRUS OX103 (CAS Mixture)			
	LC50	American Oyster	> 640 mg/L, Static Acute Bioassay, 96 hour
	NOEL	American Oyster	12 mg/L, Static Acute Bioassay, 96 hour
Aquatic			
Crustacea	LC50	Daphnia magna	0.49 mg/L, Static Acute Bioassay, 48 hour
		Grass Shrimp (Palaemonetes pugio)	14 mg/L, Static Acute Bioassay, 96 hour
	NOEL	Daphnia magna	0.32 mg/L, Static Acute Bioassay, 48 hour
			0.06 mg/L, Chronic Bioassay, 21 day
		Grass Shrimp (Palaemonetes pugio)	6.5 mg/L, Static Acute Bioassay, 96 hour

Product		Species	Test Results
Fish	LC50	Fathead Minnow	2.43 mg/L, Static Acute Bioassay, 96 hour
		Rainbow Trout	0.94 mg/L, Static Acute Bioassay, 96 hour
		Sheepshead Minnow	21.6 mg/L, Static Acute Bioassay, 96 hour
	NOEL	Fathead Minnow	1.83 mg/L, Static Acute Bioassay, 96 hour
		Rainbow Trout	0.54 mg/L, Static Acute Bioassay, 96 hour
		Sheepshead Minnow	12.1 mg/L, Static Acute Bioassay, 96 hour

Bioaccumulative potential Not bioaccumulating

Mobility in soil No data available.

Other adverse effects Not available.

Persistence and degradability

Testing has shown product not to be readily biodegradable. When dissolved in water, Bromo-chloro-5,5-dimethyl hydantoin hydrolyses immediately to hypobromous acid, hypochlorous acid (the active biocides), and 5,5-dimethylhydantoin.

- **COD (mgO2/g)** 920
- **BOD 5 (mgO2/g)** 6
- **BOD 28 (mgO2/g)** 11
- **Closed Bottle Test (% Degradation in 28 days)** 2
- **Zahn-Wellens Test (% Degradation in 28 days)** 0
- **TOC (mg C/g)** 250

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F
D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

- **UN number** UN3085
- **UN proper shipping name** Oxidizing solid, corrosive, n.o.s. (BROMO-CHLORO, 5,5-DIMETHYL HYDANTOIN)
- **Transport hazard class(es)**
  - **Class** 5.1
  - **Subsidiary risk** 8
- **Packing group** III
- **Special precautions for user** Not available.
- **ERG number** 140

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN3085
UN proper shipping name	Oxidizing solid, corrosive, n.o.s. (BROMO-CHLORO, 5,5-DIMETHYL HYDANTOIN)
Transport hazard class(es)	
Class	5.1
Subsidiary risk	8
Packing group	III
Environmental hazards	Yes
ERG Code	140
Special precautions for user	Not available.

IMDG

UN number	UN3085
UN proper shipping name	OXIDIZING SOLID, CORROSIVE, N.O.S. (BROMO-CHLORO, 5,5-DIMETHYL HYDANTOIN), MARINE POLLUTANT
Transport hazard class(es)	
Class	5.1
Subsidiary risk	8
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-Q
Special precautions for user	Not available.

DOT

IATA; IMDG

Marine pollutant

General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This is an EPA registered biocide and is exempt from TSCA inventory requirements. See FIFRA registry number.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Oxidizer (liquid, solid, or gas)
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

FIFRA registration number

83451-4-3876

TSCA

This is an EPA registered biocide and is exempt from TSCA inventory requirements.

FIFRA hazard statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER
Corrosive
Causes irreversible eye damage and skin burns
Harmful if swallowed
This pesticide is toxic to fish and aquatic organisms

Food and drug administration

The ingredients in this product are approved by FDA under 21 CFR 176.300.

NSF Registered and/or meets USDA (according to 1998 guidelines):

Registration No. – 140722
Category Code(s):
G5 Cooling and retort water treatment products
G7 Boiler, steam line treatment products – nonfood contact

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Nov-17-2014

Revision date Jun-19-2019

Version # 2.1

NFPA ratings Health: 3
Flammability: 0
Instability: 0
Special hazards: OX

NFPA ratings

List of abbreviations

CAS: Chemical Abstract Service Registration Number
ACGIH: American Conference of Governmental Industrial Hygienists
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.
NFPA: National Fire Protection Association

References: No data available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information

Accidental release measures: Methods and materials for containment and cleaning up
Transport information: General information
Regulatory information: California Prop 65
Regulatory information: US federal regulations

Prepared by This SDS has been prepared by SUEZ Regulatory Department (1-215-355-3300).

VEOLIA

SAFETY DATA SHEET
STEAMATE* LSA1901

1. Identification

Product identifier	**STEAMATE LSA1901**
Other means of identification	None.
Recommended use	Steam condensate treatment.
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1B
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Flammable liquid and vapor. Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful if inhaled. May cause respiratory irritation.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Dimethylaminoethanol (DMAE)	108-01-0	20 - 40
Methoxypropylamine, 3-	5332-73-0	20 - 40

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact URGENT! Immediately flush eyes with water for 30 minutes while removing contact lenses. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Do not induce vomiting. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Corrosive material It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage.

General information Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). Foam or water create a slippery condition. Spread sand or grit.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray. Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Use water spray to reduce vapors or divert vapor cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Alkaline. corrosive to skin. corrosive to the eyes. Do not mix with acidic material. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store in cool, well ventilated area. Store containers closed when not in use. Store away from oxidizers. Store away from acids. Do not store in aluminum containers.

8. Exposure controls/personal protection

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Methoxypropylamine, 3- (CAS 5332-73-0)	STEL	15 ppm
	TWA	5 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Suitable gloves can be recommended by the glove supplier. Glove selection must take into account any solvents and other hazards present.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Wash off after each use. Replace as necessary.

Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Colorless to yellow
Odor	Strong amine
Odor threshold	Not available.
pH (concentrated product)	13
Melting point/freezing point	< -22 °F (< -30 °C)
Initial boiling point and boiling range	Not available.
Flash point	127 °F (53 °C) P-M(CC)
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	12 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	> 1 (Air = 1)
Relative density	0.93
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	3 cps
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	11.9 (5% SOL.)
Pour point	< -22 °F (< -30 °C)
VOC	80 % (Estimated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Contact with strong acids may cause a violent reaction releasing heat. Friction, heat or other sources of ignition may cause a reaction releasing heat and toxic fumes. Contact with oxidizers may cause fire or explosion.

Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing substances. Peroxides. Phenols.
Hazardous decomposition products	Ammonia, oxides of carbon and nitrogen evolved in fire. Volatile amines.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled. Mists or aerosols cause irritation to upper respiratory tract.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity	Harmful if inhaled. Harmful if swallowed. May cause respiratory irritation. May cause an allergic skin reaction.

Product	Species	Test Results
STEAMATE LSA1901		
Acute		
Dermal		
LD50	Rabbit	3056 mg/kg (Calculated according to GHS additivity formula (Category 5))
Inhalation		
Vapor		
LC50	Rat	15.28 mg/l, 4 Hour (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	1100 mg/kg (Calculated according to GHS additivity formula (Category 4))

Components	Species	Test Results
Dimethylaminoethanol (DMAE) (CAS 108-01-0)		
Acute		
Dermal		
LD50	Rabbit	1657 mg/kg
Inhalation		
Vapor		
LC50	Rat	5.98 mg/l, 4 Hour
Oral		
LD50	Rat	1210 mg/kg
Methoxypropylamine, 3- (CAS 5332-73-0)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	690 mg/kg

Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization	This product is not expected to cause respiratory sensitization.
Skin sensitization	May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Based on available data, the classification criteria are not met.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	196.9 mg/l, 48 hour (pH adjusted)
	NOEL	Daphnia magna	100 mg/l, 48 Hour (pH adjusted)
Fish	LC50	Fathead Minnow	237.3 mg/l, 96 hour (pH adjusted)
	NOEL	Fathead Minnow	200 mg/l, 96 Hour (pH adjusted)

Persistence and degradability No data is available on the degradability of this product.

No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F
D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN2733

UN proper shipping name Amine, flammable, corrosive, n.o.s. (METHOXYPROPYLAMINE,3-, 2-DIMETHYLAMINOETHANOL)

Transport hazard class(es)

Class 3

Subsidiary risk 8

Packing group II

Special precautions for user Not available.
ERG number 132
Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number UN2733
UN proper shipping name Amines, flammable, corrosive, n.o.s. (METHOXYPROPYLAMINE,3-, 2-DIMETHYLAMINOETHANOL)
Transport hazard class(es)
Class 3
Subsidiary risk 8
Packing group II
Environmental hazards No.
ERG Code 132
Special precautions for user Not available.

IMDG

UN number UN2733
UN proper shipping name AMINES, FLAMMABLE, CORROSIVE, N.O.S. (METHOXYPROPYLAMINE,3-, 2-DIMETHYLAMINOETHANOL)
Transport hazard class(es)
Class 3
Subsidiary risk 8
Packing group II
Environmental hazards
Marine pollutant No.
EmS F-E, S-C
Special precautions for user Not available.

DOT

IATA; IMDG

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Feb-13-2015

Revision date Feb-19-2023

Version # 3.3

NFPA ratings Health: 3
Flammability: 3
Instability: 0

NFPA ratings

List of abbreviations	CAS: Chemical Abstract Service Registration Number TSRN indicates a Trade Secret Registry Number is used in place of the CAS number. ACGIH: American Conference of Governmental Industrial Hygienists NOEL: No Observed Effect Level STEL: Short Term Exposure Limit LC50: Lethal Concentration, 50% LD50: Lethal Dose, 50% TWA: Time Weighted Average BOD: Biochemical Oxygen Demand COD: Chemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Exposure controls/personal protection: Appropriate engineering controls Exposure controls/personal protection: Respiratory protection Other information, including date of preparation or last revision: Prepared by
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

* Trademark of Veolia. May be registered in one or more countries.

SAFETY DATA SHEET

Section 1. Identification

Product name : STADIS 450
Product code : PFR450

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Not available.

Print date : 2/27/2015.
Validation date : 2/27/2015.
Version : 1

Supplier's details : Baker Petrolite
A Baker Hughes Company
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/MSDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. cst, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CANUTEC: 613-996-6666 (Canada 24 hours)
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION [Unborn child] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Highly flammable liquid and vapor.
Causes serious eye irritation.
Causes skin irritation.
Suspected of damaging the unborn child.
Suspected of causing cancer.
May cause drowsiness and dizziness.

Precautionary statements

Section 2. Hazards identification

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.

Response : IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazards not otherwise classified : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Toluene	40 - 50	108-88-3
Heavy aromatic naphtha	10 - 20	64742-94-5
Dinonylnaphthalenesulfonic acid	5 - 10	25322-17-2
Isopropanol	1 - 5	67-63-0
Naphthalene	1 - 5	91-20-3

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : pain or irritation,watering,redness

Inhalation : nausea or vomiting,headache,drowsiness/fatigue,dizziness/vertigo,unconsciousness, reduced fetal weight,increase in fetal deaths,skeletal malformations

Skin contact : irritation,redness,dryness,cracking,reduced fetal weight,increase in fetal deaths,skeletal malformations

Ingestion : reduced fetal weight,increase in fetal deaths,skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,sulfur oxides

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue

Section 7. Handling and storage

and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredients:	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
Toluene	US ACGIH	20	-	-	-	-	-	-	-	-	
	OSHA PEL 1989	100	375	-	150	560	-	-	-	-	
	OSHA PEL Z2	200	-	-	-	-	-	300	-	-	
Isopropanol	US ACGIH	200	-	-	400	-	-	-	-	-	
	OSHA PEL	400	980	-	-	-	-	-	-	-	
	OSHA PEL 1989	400	980	-	500	1225	-	-	-	-	
Naphthalene	US ACGIH	10	52	-	-	-	-	-	-	-	[1]
	OSHA PEL	10	50	-	-	-	-	-	-	-	
	OSHA PEL 1989	10	50	-	15	75	-	-	-	-	

[1]Absorbed through skin.

Consult local authorities for acceptable exposure limits.

Only components of this product with established exposure limits appear in the box above.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Section 8. Exposure controls/personal protection

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting/freezing point : Not available.

Boiling point : Not available.

Initial Boiling Point : Not available.

Flash point : Closed cup: 5.6°C (42.1°F) [PMCC]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : >1 [Air = 1]

Relative density : 0.92 (15.6°C)

Density : 7.66 (lbs/gal)

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

VOC : Not available.

Pour Point : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials and acids.

Section 10. Stability and reactivity

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Toluene	LC50 Inhalation Vapor	Female rat	5100 ppm	4 hours
	LC50 Inhalation Vapor	Rat	49000 mg/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Heavy aromatic naphtha	LC50 Inhalation Vapor	Rat	>11.4 mg/l	6 hours
	LD50 Oral	Rat	3200 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Dinonylnaphthalenesulfonic acid	LD50 Oral	Rat	>5000 mg/kg	-
Isopropanol	LC50 Inhalation Vapor	Rat	>10000 ppm	6 hours
	LD50 Dermal	Rabbit	6.29 g/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-

Irritation/Corrosion

No applicable toxicity data

Sensitization

No applicable toxicity data

Mutagenicity

No applicable toxicity data

Carcinogenicity

Product/ingredient name	OSHA	IARC	NTP
Toluene	-	3	-
Isopropanol	-	3	-
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

No applicable toxicity data

Teratogenicity

No applicable toxicity data

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 3	Not applicable.	Narcotic effects
Heavy aromatic naphtha	Category 3	Not applicable.	Narcotic effects
Isopropanol	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Section 11. Toxicological information

Name	Result
Toluene	ASPIRATION HAZARD - Category 1
Heavy aromatic naphtha	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	10315.9 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Toluene	Acute EC50 433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch	96 hours
	Chronic NOEC 500000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Isopropanol	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1400000 µg/l	Fish - Gambusia affinis	96 hours
Naphthalene	Acute EC50 1.6 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours
	Chronic NOEC 0.67 ppm Fresh water	Fish - Oncorhynchus kisutch	40 days

Section 12. Ecological information

Persistence and degradability

Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	Flammable liquid, n.o.s. (Contains: Toluene, Isopropanol)	Flammable liquid, n.o.s. (Contains: Toluene, Isopropanol)	Flammable liquid, n.o.s. (Contains: Toluene, Isopropanol)	FLAMMABLE LIQUID, N.O.S. (Contains: Toluene, Isopropanol)
Transport hazard class(es)	3 	3 	3 	3 
Packing group	II	II	II	II
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	**Emergency schedules (EmS)** 3-07	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 14. Transport information

DOT Reportable Quantity
Toluene, 290 gal of this product.
Naphthalene, 870 gal of this product.
Benzene, 2194 gal of this product.

Marine pollutant Not available.

North-America NAERG : 128

Section 15. Regulatory information

U.S. Federal regulations :
TSCA 12(b) one-time export: No products were found.
TSCA 12(b) annual export notification: No products were found.
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Toluene; Naphthalene; Benzene
Clean Water Act (CWA) 311: Toluene; Naphthalene; Benzene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

SARA 302/304 : No products were found.

SARA 311/312

Classification :
Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

SARA 313

	Product name	CAS number	%
Supplier notification	Toluene Naphthalene	108-88-3 91-20-3	40 - 50 1 - 5

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)

History

Date of printing : 2/27/2015.

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this MSDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or

Section 16. Other information

disposal of this product.

This MSDS was prepared and is to be used for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

SAFETY DATA SHEET

1. Identification

Product identifier	**SWT201**
Other means of identification	None.
Recommended use	ALL PROPER AND LEGAL PURPOSES
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	Spectrum Water Technology	
Address	6135 Industrial Drive Geismar, LA 70734	
Telephone	225-647-3565	
E-mail	Not available.	
Emergency phone number	800-424-9300	CHEMTREC

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention	Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SULFURIC ACID, ALUMINUM SALT (3:2)		10043-01-3	31.25

Chemical name	Common name and synonyms	CAS number	%
SULFURIC ACID		7664-93-9	10.75
Other components below reportable levels			58

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed
Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information
If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling
Respiratory protection is “only required” when sprays are present in the air.

Conditions for safe storage, including any incompatibilities
Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
SULFURIC ACID (CAS 7664-93-9)	PEL	1 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
SULFURIC ACID (CAS 7664-93-9)	TWA	0.2 mg/m3	Thoracic fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
SULFURIC ACID (CAS 7664-93-9)	TWA	1 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color Clear to amber

Odor NONE

Odor threshold Not available.

pH 2-4 s.u.

Melting point/freezing point 1068 °F (575.56 °C) estimated

Initial boiling point and boiling range 265.48 °F (129.71 °C) estimated

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	10.75 lbs/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	58 % estimated
Specific gravity	1.29

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity	May cause respiratory irritation.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
SULFURIC ACID (CAS 7664-93-9)			
Aquatic			
Crustacea	EC50	Daphnia magna	> 100 mg/l, 48 hours
	LC50	Aesop shrimp (Pandalus montagui)	42.5 mg/l, 48 hours
		Cockle (Cerastoderma edule)	200 - 500 mg/l, 48 hours
		Common shrimp, sand shrimp (Crangon crangon)	70 - 80 mg/l, 48 hours
		Green or European shore crab (Carcinus maenas)	70 - 80 mg/l, 48 hours
Fish	LC50	Starry, european flounder (Platichthys flesus)	100 - 330 mg/l, 48 hours
		Western mosquitofish (Gambusia affinis)	42 mg/l, 24 hours
			42 mg/l, 48 hours
			42 mg/l, 96 hours
SULFURIC ACID, ALUMINUM SALT (3:2) (CAS 10043-01-3)			
Aquatic			
Crustacea	EC50	Amphipod (Crangonyx pseudogracilis)	11.8 - 14 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	3.4 - 5.6 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ALUMINUM SULFATE, SULFURIC ACID)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	154

DOT information on packaging may be different from that listed.

DOT

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

SULFURIC ACID (CAS 7664-93-9)	Listed.
SULFURIC ACID, ALUMINUM SALT (3:2) (CAS 10043-01-3)	Listed.

SARA 304 Emergency release notification

SULFURIC ACID (CAS 7664-93-9)	1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
SULFURIC ACID	7664-93-9	1000	1000 lbs		

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
SULFURIC ACID	7664-93-9	10.75

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

SULFURIC ACID (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

SULFURIC ACID (CAS 7664-93-9) 20 %WV

DEA Exempt Chemical Mixtures Code Number

SULFURIC ACID (CAS 7664-93-9) 6552

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

SULFURIC ACID (CAS 7664-93-9)
SULFURIC ACID, ALUMINUM SALT (3:2) (CAS 10043-01-3)

US. New Jersey Worker and Community Right-to-Know Act

SULFURIC ACID (CAS 7664-93-9)
SULFURIC ACID, ALUMINUM SALT (3:2) (CAS 10043-01-3)

US. Pennsylvania Worker and Community Right-to-Know Law

SULFURIC ACID (CAS 7664-93-9)
SULFURIC ACID, ALUMINUM SALT (3:2) (CAS 10043-01-3)

US. Rhode Island RTK

SULFURIC ACID (CAS 7664-93-9)
SULFURIC ACID, ALUMINUM SALT (3:2) (CAS 10043-01-3)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 04-02-2015

Revision date 03-10-2017

Version # 03

HMIS® ratings Health: 3
Flammability: 0
Physical hazard: 0

NFPA ratings Health: 3
Flammability: 0
Instability: 1

Disclaimer	While Spectrum believes the information contained herein to be accurate, Spectrum makes no representation or warranty, express or implied, regarding, and assumes no liability for, the accuracy or completeness of the information. The Buyer assumes all responsibility for handling, using and/or reselling the Product in accordance with applicable federal, state, and local law. This SDS shall not in any way limit or preclude the operation and effect of any of the provisions of Spectrum's terms and conditions of sale.
Revision information	Hazard(s) identification: Response Accidental release measures: Environmental precautions Ecological information: Ecotoxicity

SWT - 1200

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 06/08/2015 Date of Issue: 06/08/2015 Version: 1.1

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: SWT - 1200

Intended Use of the Product

Use of the Substance/Mixture: Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Name, Address, and Telephone of the Responsible Party

Manufacturer

Spectrum Water Technology
6135 Industrial Drive
Geismar, LA 70734
p: 225.647.3565
www.spectrumwater.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / **US: CHEMTREC +1-800-424-9300** CCN726304

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Met. Corr. 1 H290
Skin Irrit. 2 H315
Eye Dam. 1 H318

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS05

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) :
H290 - May be corrosive to metals.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.

Precautionary Statements (GHS-US) :
P234 - Keep only in original container.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P321 - Specific treatment (see Section 4).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P390 - Absorb spillage to prevent material damage.
P406 - Store in corrosive resistant container with a resistant inner liner.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. If involved in a fire and thermal decomposition occurs, or other decomposition occurs corrosive, toxic, and acrid vapors may be released.

Unknown Acute Toxicity (GHS-US)

Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier		Classification (GHS-US)
Aluminum chloride, basic	(CAS No) 1327-41-9		Met. Corr. 1, H290 Eye Dam. 1, H318
Phosphoric acid	(CAS No) 7664-38-2		Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
Water	(CAS No) 7732-18-5		Not classified

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

*A range of concentration as prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Keep at rest and in a position comfortable for breathing. Seek medical attention. Symptoms may be delayed.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash skin thoroughly with mild soap and water. Seek medical attention immediately if irritation develops or persists.

Eye Contact: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth thoroughly with water. Do NOT induce vomiting. Seek medical attention immediately.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes skin irritation. Causes serious eye damage.

Inhalation: May cause irritation to the respiratory tract. Symptoms may be delayed.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye damage.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Reacts with (strong) oxidizers: (increased) risk of fire.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Keep upwind. Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Corrosive vapors. Acrid smoke and irritating fumes. Hydrogen chloride.

Other Information: Do not allow the product to be released into the environment.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all unnecessary exposure. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Keep upwind.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Ventilate area. Eliminate ignition sources.

Environmental Precautions

If spill could potentially enter any waterway, including intermittent dry creeks, contact the U.S. COAST GUARD NATIONAL RESPONSE CENTER at 800-424-8802. In case of accident or road spill notify CHEMTREC at 800-424-9300 (in USA) or CANUTEC at 613-996-6666 (in Canada). In other countries call CHEMTREC at (International code) +1-703-527-3887.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Ventilate area. Clear up spills immediately and dispose of waste safely. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Collect absorbed material and place into a sealed, labeled container for proper disposal. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Contact with metals may evolve flammable hydrogen gas. May be corrosive to metals.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke in areas where product is used.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Observe all regulations and local requirements regarding storage of containers.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store away from oxygen and oxidizers. Storage areas should be periodically checked for corrosion and integrity.

Incompatible Materials: Strong oxidizers. Strong bases. Alkalis. Metals.

Specific End Use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Phosphoric acid (7664-38-2)		
Mexico	OEL TWA (mg/m³)	1 mg/m³
Mexico	OEL STEL (mg/m³)	3 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
USA ACGIH	ACGIH STEL (mg/m³)	3 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (STEL) (mg/m³)	3 mg/m³
USA IDLH	US IDLH (mg/m³)	1000 mg/m³
Alberta	OEL STEL (mg/m³)	3 mg/m³
Alberta	OEL TWA (mg/m³)	1 mg/m³
British Columbia	OEL STEL (mg/m³)	3 mg/m³
British Columbia	OEL TWA (mg/m³)	1 mg/m³
Manitoba	OEL STEL (mg/m³)	3 mg/m³
Manitoba	OEL TWA (mg/m³)	1 mg/m³
New Brunswick	OEL STEL (mg/m³)	3 mg/m³
New Brunswick	OEL TWA (mg/m³)	1 mg/m³
Newfoundland & Labrador	OEL STEL (mg/m³)	3 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	1 mg/m³
Nova Scotia	OEL STEL (mg/m³)	3 mg/m³
Nova Scotia	OEL TWA (mg/m³)	1 mg/m³
Nunavut	OEL STEL (mg/m³)	3 mg/m³
Nunavut	OEL TWA (mg/m³)	1 mg/m³
Northwest Territories	OEL STEL (mg/m³)	3 mg/m³
Northwest Territories	OEL TWA (mg/m³)	1 mg/m³
Ontario	OEL STEL (mg/m³)	3 mg/m³
Ontario	OEL TWA (mg/m³)	1 mg/m³
Prince Edward Island	OEL STEL (mg/m³)	3 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	1 mg/m³
Québec	VECD (mg/m³)	3 mg/m³
Québec	VEMP (mg/m³)	1 mg/m³
Saskatchewan	OEL STEL (mg/m³)	3 mg/m³
Saskatchewan	OEL TWA (mg/m³)	1 mg/m³
Yukon	OEL STEL (mg/m³)	3 mg/m³
Yukon	OEL TWA (mg/m³)	1 mg/m³

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Avoid all unnecessary exposure. Insufficient ventilation: wear respiratory protection. Protective clothing. Protective goggles. Gloves.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Impermeable protective gloves.

Eye Protection: A full face shield is recommended. Chemical safety goggles.

Skin and Body Protection: Chemical resistant suit. Rubber apron, boots.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance	:	Not available
Odor	:	Not available
Odor Threshold	:	Not available
pH	:	1 - 3
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not applicable
Auto-ignition Temperature	:	Not applicable
Decomposition Temperature	:	Not applicable
Flammability (solid, gas)	:	Not applicable
Lower Flammable Limit	:	Not applicable
Upper Flammable Limit	:	Not applicable
Vapor Pressure	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	1.29 - 1.34
Solubility	:	100%
Partition Coefficient: N-octanol/water	:	Not available
Viscosity	:	Not available
Explosive properties	:	Product is not explosive
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Reacts with (strong) oxidizers: (increased) risk of fire.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

Incompatible Materials: Strong bases. Strong oxidizers. Alkalis. Metal.

Hazardous Decomposition Products: Corrosive vapors. Acrid smoke and irritating fumes. Hydrogen chloride.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

pH: 1 - 3

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: 1 - 3

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause irritation to the respiratory tract. Symptoms may be delayed.

Symptoms/Injuries After Skin Contact: Causes skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Aluminum chloride, basic (1327-41-9)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

Phosphoric acid (7664-38-2)	
LD50 Oral Rat	1530 mg/kg
LD50 Dermal Rabbit	2730 mg/kg
LC50 Inhalation Rat	> 850 mg/m³ (Exposure time: 1 h)

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Not classified

Persistence and Degradability
Not available

Bioaccumulative Potential
Not available

Mobility in Soil
Not available

Other Adverse Effects
Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods: Dispose of waste material in accordance with all local, regional, national, territorial, provincial and international regulations.
Sewage Disposal Recommendations: Do not dispose of waste into sewer. Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (CONTAINS POLYALUMINUM HYDROXYCHLORIDE, PHOSPHORIC ACID)
Hazard Class : 8
Identification Number : UN3264
Label Codes : 8
Packing Group : III
ERG Number : 154

14.2 In Accordance with IMDG

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (CONTAINS POLYALUMINUM HYDROXYCHLORIDE, PHOSPHORIC ACID)
Hazard Class : 8
Identification Number : UN3264
Packing Group : III
Label Codes : 8
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B

14.3 In Accordance with IATA

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (CONTAINS POLYALUMINUM HYDROXYCHLORIDE, PHOSPHORIC ACID)

Packing Group	: III
Identification Number	: UN3264
Hazard Class	: 8
Label Codes	: 8
ERG Code (IATA)	: 8L

14.4 In Accordance with TDG	
Proper Shipping Name	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (CONTAINS POLYALUMINUM HYDROXYCHLORIDE, PHOSPHORIC ACID)
Packing Group	: III
Hazard Class	: 8
Identification Number	: UN3264
Label Codes	: 8

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

SWT 1200	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Aluminum chloride, basic (1327-41-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phosphoric acid (7664-38-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

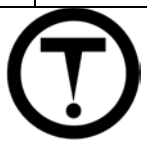
Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Phosphoric acid (7664-38-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

SWT 1200	
WHMIS Classification	Class E - Corrosive Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects



Aluminum chloride, basic (1327-41-9)	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Class E - Corrosive Material

Phosphoric acid (7664-38-2)	
Listed on the Canadian DSL (Domestic Sustances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class E - Corrosive Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Water (7732-18-5)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 06/08/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage

Party Responsible for the Preparation of This Document

Spectrum Biotechnologies, LLC

SDS Information: (225) 647-3565

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Spectrum Water Technology and its affiliates assume no responsibility.

SWT-1315

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 06/08/2015 Date of Issue: 06/08/2015 Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: SWT-1315

Intended Use of the Product

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Name, Address, and Telephone of the Responsible Party

Manufacturer

Spectrum Water Technology
6135 Industrial Drive
Geismar, LA 70734
p: 225.647.3565
www.spectrumwater.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300 CCN726304

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Eye Irrit. 2A H319
Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS07

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US) : P264 - Wash hands, forearms, and exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	60 - 100	Not classified
Aluminum chloride, basic	(CAS No) 1327-41-9	15 - 40	Eye Irrit. 2A, H319
Quaternary Ammonium Polymer†	(CAS No) Proprietary	5 - 10	Aquatic Chronic 3, H412

†HMIRA:

The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]. More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary due to varying composition.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation

Inhalation: May cause irritation to the respiratory tract.

Skin Contact: May cause skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, seek medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Not explosive, but may release hydrogen gas on contact with some metals.

Reactivity: Hazardous reactions will not occur.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapors from decompostion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: None known.

Other Information: May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Absorb spillage to prevent material damage. Dispose in a safe manner in accordance with local/national regulations. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalis. Alcohols. Amines

Specific End Use(s) Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Safety glasses. Face shield. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Acid-resistant clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Wear approved mask.

Consumer Exposure Controls: Do not eat, drink, or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Colorless to amber
Odor	:	Not available
Odor Threshold	:	Not available
pH	:	2 - 5
Melting Point	:	Not available
Freezing Point	:	-14 °C (7 °F)
Boiling Point	:	Not available
Flash Point	:	Not applicable
Auto-ignition Temperature	:	Not applicable
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not flammable
Lower Flammable Limit	:	Not applicable
Upper Flammable Limit	:	Not applicable
Vapor Pressure	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	1.15 - 1.20
Solubility	:	100%
Partition Coefficient: N-octanol/water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.
Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalis. Alcohols. Amines.
Hazardous Decomposition Products: Carbon oxides (CO, CO_2). Hydrogen chloride. Metal oxides (Al).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified **pH:** 2 - 5
Serious Eye Damage/Irritation: Causes serious eye irritation. **pH:** 2 - 5
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not classified
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: May cause irritation to the respiratory tract.
Symptoms/Injuries After Skin Contact: May cause skin irritation.
Symptoms/Injuries After Eye Contact: Causes serious eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg

Aluminum chloride, basic (1327-41-9)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

Quaternary Ammonium Polymer	
LD50 Oral Rat	3000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Persistence and Degradability

SWT-1315	
Persistence and Degradability	Not established.

Bioaccumulative Potential

SWT-1315	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT Not regulated for transport

14.2 In Accordance with IMDG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

SWT-1315	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Aluminum chloride, basic (1327-41-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quaternary Ammonium Polymer
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Neither this product nor its chemical components appear on any US federal lists.

Canadian Regulations

SWT-1315	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Aluminum chloride, basic (1327-41-9)	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Class E - Corrosive Material

Quaternary Ammonium Polymer	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 06/0**8/2015**

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

Spectrum Biotechnologies, LLC
SDS Information: (225) 647-3565

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and ***Spectrum Water Technology*** *and its affiliates assume no responsibility.*

SWT-1340

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 06/08/2015 Date of Issue: 06/08/2015 Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: SWT-1340

Intended Use of the Product

No use is specified.

Name, Address, and Telephone of the Responsible Party

Manufacturer

Spectrum Water Technology
6135 Industrial Drive Geismar, LA
70734
p: 225.647.3565
www.spectrumwater.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300 CCN726304

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Eye Irrit. 2A H319
Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS07

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US) : P264 - Wash hands, forearms, and exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	40 - 70	Not classified
Aluminum chloride, basic	(CAS No) 1327-41-9	15 - 40	Eye Irrit. 2A, H319
Quaternary Ammonium Polymer†	(CAS No) Proprietary	5 - 10	Aquatic Chronic 3, H412

†HMIRA:

The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]. More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary due to varying composition.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation

Inhalation: May cause irritation to the respiratory tract.

Skin Contact: May cause skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, seek medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Not explosive, but may release hydrogen gas on contact with some metals.

Reactivity: Hazardous reactions will not occur.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapors from decompostion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: None known.

Other Information: May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Absorb spillage to prevent material damage. Dispose in a safe manner in accordance with local/national regulations. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalis. Alcohols. Amines

Specific End Use(s) Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Safety glasses. Face shield. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Acid-resistant clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Wear approved mask.

Consumer Exposure Controls: Do not eat, drink, or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Colorless to amber
Odor	:	Not available
Odor Threshold	:	Not available
pH	:	2 - 5
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not applicable
Auto-ignition Temperature	:	Not applicable
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not flammable
Lower Flammable Limit	:	Not applicable
Upper Flammable Limit	:	Not applicable
Vapor Pressure	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	1.00 - 1.20
Solubility	:	100%
Partition Coefficient: N-octanol/water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.
Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalis. Alcohols. Amines.
Hazardous Decomposition Products: Carbon oxides (CO, CO_2). Hydrogen chloride. Metal oxides (Al).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified **pH:** 2 - 5
Serious Eye Damage/Irritation: Causes serious eye irritation. **pH:** 2 - 5
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not classified
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: May cause irritation to the respiratory tract.
Symptoms/Injuries After Skin Contact: May cause skin irritation.
Symptoms/Injuries After Eye Contact: Causes serious eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg

Aluminum chloride, basic (1327-41-9)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

Quaternary Ammonium Polymer	
LD50 Oral Rat	3000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Persistence and Degradability

SWT-1340	
Persistence and Degradability	Not established.

Bioaccumulative Potential

SWT-1340	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT Not regulated for transport

14.2 In Accordance with IMDG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

14.4 In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

SWT-1340	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Aluminum chloride, basic (1327-41-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quaternary Ammonium Polymer
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Neither this product nor its chemical components appear on any US federal lists.

Canadian Regulations

SWT-1340	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Aluminum chloride, basic (1327-41-9)	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Class E - Corrosive Material

Quaternary Ammonium Polymer	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 06/08/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

Spectrum Biotechnologies, LLC
SDS Information: (225) 647-3565

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and ***Spectrum Water Technology*** *and its affiliates assume no responsibility.*

Spectrum Water Technology
www.spectrumwater.com
225-647-3565

SAFETY DATA SHEET

SWT2030

Revision date 2015-05-04 **Revision number** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name SWT2030

Other means of identification

Product code SWT2030
Synonyms Water And Wastewater Treatment Coagulant/Flocculant

Recommended use of the chemical and restrictions on use

Recommended use [RU] No information available
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Spectrum Water Technology
6135 Industrial Drive
Geismar, LA 70734
225-647-3565
Hours: Monday-Friday 9:00-5:00 CST (Central Standard Time)

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: (800) 262-8200 CCN726304
Outside USA - +1 (703) 741-5500 collect calls accepted

Contact Point chemtrec@chemtrec.com

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Corrosive to metals	Category 1

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Physical state	Color	Appearance	Odor
liquid	colorless to yellow	clear to slightly hazy	no appreciable odor

WARNING

Hazard statements
Causes skin irritation
Causes serious eye irritation
May be corrosive to metals

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep only in original container

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store in corrosive resistant container with a resistant inner liner

Other information
• Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	weight-%	TRADE SECRET
Trade Secret Ingredient	PROPRIETARY	15 - 25%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First Aid Measures

Eye contact
Remove contact lenses, if worn. Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Get medical attention if irritation develops and persists.

Skin contact
Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Ingestion
Seek medical attention immediately. Give large amounts of water to drink. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person.

Inhalation
Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Most important symptoms and effects, both acute and delayed

Acute effects
Possible eye, skin and respiratory tract irritation.

Chronic effects
May aggravate existing skin, eye, and lung conditions. Persons with kidney disorders have an increased risk from exposure based on general information found on aluminum salts.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the use of demulcents. Note: Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media
Water Spray, Carbon Dioxide, Foam, Dry Chemical.

Extinguishing media which must not be used for safety reasons
No information available

Special hazards arising from the substance or mixture

Special Hazard
May produce hazardous fumes or hazardous decomposition products.

Advice for firefighters

Firefighting measures
Product is a water solution and nonflammable. In a fire, this product may build up pressure and rupture a sealed container; cool exposed containers with water spray. Use self-contained breathing apparatus in confined areas; avoid breathing mist or spray.

Special protective equipment for firefighters
Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

Explosion data

Sensitivity to Mechanical Impact
None.

Sensitivity to Static Discharge
None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear adequate personal protective clothing and equipment. Approved breathing apparatus may be necessary.

Environmental precautions

Environmental precautions
Do not allow liquid to enter streams or waterways.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so. Build dikes as necessary to contain flow of large spills.

Methods for cleaning up
Clear spills immediately. For small spills, use soda ash or lime to neutralize, an inert material to absorb, or wash product to a chemical sewer. Place contaminated materials into containers and store in a safe place to await proper disposal. Caution: Use of soda ash or lime may generate carbon dioxide gas. Provide adequate ventilation to spill area.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Keep container closed when not in use
Keep away from heat and open flame.
Avoid contact with eyes, skin and clothing
Wear chemical splash goggles, gloves, and protective clothing when handling.
Wash thoroughly after handling
Avoid breathing vapor or mist
Use with adequate ventilation and employ respiratory protection where mist or spray may be generated.
FOR INDUSTRIAL USE ONLY.

Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed when not in use.
Store in a cool, dry place away from direct heat.
Do not store in unlined metal containers.
Product may slowly corrode iron, brass, copper, aluminum, mild steel, and stainless steel.

Incompatible products
Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls
Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

Individual protection measures, such as personal protective equipment

Eye/face Protection
Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).

Hand Protection
Appropriate chemical resistant gloves should be worn.

Skin and body protection
Standard work clothing and work shoes.

Respiratory protection
If exposures exceed the PEL or TLV, use NIOSH/MSHA approved respirator in accordance with OSHA Respiratory Protection Requirements under 29 CFR 1910.134. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

Other personal protection data
Eyewash fountains and safety showers must be easily accessible.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid
Color	colorless to yellow
Appearance	clear to slightly hazy
Odor	no appreciable odor
Odor threshold	No information available

Property	Values	Remarks / Method
pH	3.5 - 4.5	as is
Melting / freezing point	No information available	No information available
Boiling point / boiling range	No information available	No information available
Flash point	Not applicable	No information available
Evaporation rate	No information available	No information available

Flammability (solid, gas)	Not applicable	No information available
Flammability Limit in Air		
Upper flammability limit	Not applicable	No information available
Lower flammability limit	Not applicable	No information available
Vapor pressure	No information available	No information available
Vapor density	No information available	No information available
Specific gravity	1.125 - 1.145	No information available
Solubility (water)	Soluble below pH 4	No information available
Solubility in other solvents	No information available	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	Not applicable	No information available
Decomposition temperature	No information available	No information available
Kinematic viscosity	No information available	No information available
Dynamic viscosity	3440 - 5160 cps	No information available

Other information

Density	9.38 - 9.55 lb/gal
Bulk Density	No information available
Explosive properties	No information available.
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
Volatile organic compounds (VOCs) content	No information available
Percent Volatile, wt.%	60 - 70 % (Water)

10. STABILITY AND REACTIVITY

Reactivity

Reactivity
No data available.

Chemical stability

Chemical stability
Stable under normal conditions of handling, use and transportation.

Possibility of hazardous reactions

Possibility of hazardous reactions
None under normal processing.

Hazardous polymerization
Not anticipated under normal or recommended handling and storage conditions.

Conditions to avoid

Conditions to avoid
None known

Incompatible materials

Materials to avoid
Alkalis.

Hazardous decomposition products

Hazardous decomposition products
Thermal decomposition may release toxic and/or hazardous gases such as aluminum, Cl_2, and HCl.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
May cause moderate eye irritation that can become severe with prolonged contact. Prolonged exposure to Aluminum salts may cause conjunctivitis.

Skin contact
Prolonged and/or repeated contact may cause skin irritation.

Ingestion
May cause irritation of the mouth, throat and stomach. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Inhalation
Inhalation of mist or vapor may cause respiratory tract irritation.

Acute toxicity - Product Information

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	No information available

Acute toxicity - Component Information

Component	weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret Ingredient	15 - 25%	= 9187 mg/kg (Rat)	> 2000 mg/kg (Rat)	--

Information on toxicological effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Irritating to skin

Serious eye damage/eye irritation
Causes serious eye irritation

Sensitization
No information available

Germ cell mutagenicity
No information available

Carcinogenicity
This product does not contain any components in concentrations greater than or equal to 0.1% that are listed as known or suspected carcinogens by NTP, IARC, ACGIH, or OSHA.

Reproductive toxicity
No information available

Specific target organ toxicity - Single exposure
No information available.

Specific target organ toxicity - Repeated exposure
No information available

Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	11711 mg/kg
ATEmix (dermal)	11640 mg/kg

Other information
Data is based on a product of similar composition and conclusions are drawn from sources other than direct testing.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity - Product Information

Fish	No information available
Crustacea	No information available
Algae/aquatic plants	No information available

Acute aquatic toxicity - Component Information

Component	weight-%	Algae/aquatic plants	Fish	Toxicity to daphnia and other aquatic invertebrates
Trade Secret Ingredient	15 - 25%	--	LC50 (96 h static) 100 - 500 mg/L (Brachydanio rerio)	--

Persistence and degradability

Persistence and degradability
No information available

Bioaccumulative potential

Bioaccumulative potential
No information available.

Mobility

Mobility
No information available

Results of PBT and vPvB assessment

PBT and vPvB assessment
No information available

Other adverse effects

Other information
No other ecological studies have been carried out on this product.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes
Dispose of product in an approved chemical waste landfill or incinerate in accordance with applicable Federal, state and local regulations.

Contaminated packaging
Since empty containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT

NOT APPLICABLE, NOT RESTRICTED.
This product is excepted from DOT regulations under 49 CFR 173.154(d) when shipped by road or railway. The product exception is referenced in 49 CFR 172.101 Table. Packaging material must not be aluminum, steel or be degraded by this product

ICAO/IATA

Regulated

UN number	UN3264
Proper shipping name	Corrosive Liquid, Acidic, Inorganic, N.O.S. (Polyaluminum Chloride Solution)
Hazard class	8
Packing group	III
ERG Code	8L

IMDG

Regulated

UN number	UN3264
Proper shipping name	Corrosive Liquid, Acidic, Inorganic, N.O.S. (Polyaluminum Chloride Solution)

Hazard class	8
Packing group	III
EmS	F-A; S-B

Harmonized Tariff Number 3824.90

15. REGULATORY INFORMATION

International Inventories

TSCA (United States)
All ingredients are on the inventory or exempt from listing

Australia (AICS)
All ingredients are on the inventory or exempt from listing

Canada (DSL)
All ingredients are on the inventory or exempt from listing

Canada (NDSL)
None of the ingredients are on the inventory.

China (IECSC)
All ingredients are on the inventory or exempt from listing

EINECS (European Inventory of Existing Chemical Substances)
All ingredients are on the inventory or exempt from listing

ELINCS (European List of Notified Chemical Substances)
None of the ingredients are on the inventory.

ENCS (Japan)
All ingredients are on the inventory or exempt from listing

South Korea (KECL)
All ingredients are on the inventory or exempt from listing

Philippines (PICCS)
All ingredients are on the inventory or exempt from listing

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
AICS - Australian Inventory of Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
IECSC - China Inventory of Existing Chemical Substances
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

U.S. Federal Regulations

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION

NFPA Rating	Health - 1	Flammability - 0	Instability - 0	Special Hazard -
HMIS Rating	Health - 1	Flammability - 0	Physical hazard - 0	Personal protection - B

Product code 3241T

Revision date 2015-05-04

Revision number 1

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : SWT5395X
FLOCCULANT

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Industrial chemical

Details of the supplier of the safety data sheet	**Emergency telephone number**
Spectrum Water Technology 6135 Industrial Drive Geismar, La 70734 United States of America	1-800-424-9300 CCN726304 **Product Information** 1-225-647-3565

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2

Eye irritation : Category 2A

Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

GHS Label element

Hazard pictograms :

Signal Word : Warning

Hazard Statements : Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear eye protection/ face protection.
Wear protective gloves.
Response:
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
Storage:
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Static Accumulating liquid

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Static Accumulator

Chemical nature : Defatter

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
ALIPHATIC HYDROCARBON	254504001-5164	Flam. Liq. 4; H227 Skin Irrit. 2; H315	>= 20.00 - < 30.00

		STOT SE 3; H336	
ALCOHOL ALKOXYLATES	254504001-5466	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 1.50 - < 5.00

Trade Secret Composition - conceal identity + concentration

SECTION 4. FIRST AID MEASURES

General advice	:	Move out of dangerous area. Call a POISON CENTRE or doctor/physician if exposed or you feel unwell. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	:	Move to fresh air. If unconscious place in recovery position and seek medical advice. Consult a physician after significant exposure.
In case of skin contact	:	Remove contaminated clothing. If irritation develops, get medical attention. If on skin, rinse well with water. Wash contaminated clothing before re-use.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye.
If swallowed	:	Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
Lung irritation
Drowsiness
confusion
irregular heartbeat
Convulsions
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : carbon dioxide and carbon monoxide
Nitrogen oxides (NOx)
Hydrocarbons
toxic fumes

Specific extinguishing methods :

Product is compatible with standard fire-fighting agents.

Further information : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of aerosol.
Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapours/dust.
Do not smoke.
Container hazardous when empty.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ALIPHATIC HYDROCARBON	254504001-5164	TWA	200 mg/m3 Non-aerosol (as total hydrocarbon vapor)	ACGIH
		REL	100 mg/m3	NIOSH/GUIDE

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:

impervious clothing
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.
When using do not eat or drink.
When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	viscous
Physical state	:	liquid
Colour	:	white
Odour	:	hydrocarbon-like
Odour Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	> 214 °F / > 101 °C
Evaporation rate	:	No data available
Flammability (liquids)	:	Static Accumulating liquid
Upper explosion limit	:	7 %(V) GLP: Calculated Explosive Limit
Lower explosion limit	:	0.6 %(V) GLP: Calculated Explosive Limit
Vapour pressure	:	19.3 hPa (20 °C) Method: ASTM D 2879-86
Relative vapour density	:	No data available

Relative density	:	No data available
Density	:	Approximate 1.03 g/cm3
Solubility(ies)		
Water solubility	:	soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	> 20.5 mm2/s (40 °C)
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Product will not undergo hazardous polymerization.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	aluminum Copper Copper alloys Strong acids Strong bases Strong oxidizing agents strong reducing agents
Hazardous decomposition products		carbon dioxide and carbon monoxide Hydrocarbons Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity
Not classified based on available information.
Components:
ALIPHATIC HYDROCARBON**:**
Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat, male and female): > 5.28 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

ALCOHOL ALKOXYLATES**:**
Acute oral toxicity : LD 50 (Rat): 1,380 mg/kg

Skin corrosion/irritation
Causes skin irritation.
Product:
Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

Components:
ALIPHATIC HYDROCARBON**:**
Result: Irritating to skin

ALCOHOL ALKOXYLATES**:**
Result: Irritating to skin

Serious eye damage/eye irritation
Causes serious eye irritation.

Product:
Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

Components:
ALIPHATIC HYDROCARBON**:**
Result: Mildly irritating to eyes

ALCOHOL ALKOXYLATES**:**
Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.
Germ cell mutagenicity
Not classified based on available information.
Carcinogenicity
Not classified based on available information.
Reproductive toxicity
Not classified based on available information.
STOT - single exposure
May cause drowsiness or dizziness.
Components:
ALIPHATIC HYDROCARBON**:**
Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure
Not classified based on available information.
Aspiration toxicity
Not classified based on available information.
Product:
No aspiration toxicity classification

Further information
Product:
Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Carcinogenicity:

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC 50 (Pimephales promelas (fathead minnow)): 26.5 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Test conducted using environmentally representative water.

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Ceriodaphnia dubia)): 5.66 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Test conducted using environmentally representative water.

Components:

ALIPHATIC HYDROCARBON**:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: WAF
Method: OECD Test Guideline 203
Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates : EL50 (Water flea (Daphnia magna)): 1.4 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: WAF
Method: OECD Test Guideline 202
Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): > 1 - 3 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: WAF

Method: OECD Test Guideline 201
Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Water flea (Daphnia magna)): 0.48 mg/l
Exposure time: 21 d
Test Type: semi-static test
Test substance: WAF
Method: OECD Test Guideline 211
Remarks: Information given is based on data obtained from similar substances.

ALCOHOL ALKOXYLATES:

Toxicity to fish : LC50 (Fish): > 1 - 10 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 1 - 10 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : ErC50 (Green algae): > 0.1 - 1.0 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia (water flea)): 0.17 mg/l
Exposure time: 21 d

Ecotoxicology Assessment
Acute aquatic toxicity : Very toxic to aquatic life.

Persistence and degradability

Components:

ALIPHATIC HYDROCARBON:

Biodegradability : Result: Inherently biodegradable
Biodegradation: 58.6 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

ALCOHOL ALKOXYLATES:

Biodegradability : Result: Readily biodegradable

Bioaccumulative potential

Components:

No data available

Mobility in soil

Components:
No data available

Other adverse effects

No data available

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant		yes

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Acute Health Hazard

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Component(s)SARA 313

California Prop 65 Proposition 65 warnings are not required for this product based on the results of a risk assessment.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : q (quantity restricted)

AUSTR : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECL : On the inventory, or in compliance with the inventory

PHIL : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

Inventories
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)
Registration: Trade Secret

Chemical Name	Identification number
ALIPHATIC HYDROCARBON	254504001-5164
ALCOHOL ALKOXYLATES	254504001-5466

SECTION 16. OTHER INFORMATION

Further information
Revision Date: 01/20/2016

Full text of H-Statements referred to under sections 2 and 3.

H227	Combustible liquid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

Further information

Sources of key data used to compile the Safety Data Sheet
Key literature references and sources of data
SOLENIS Internal data
SOLENIS internal data including own and sponsored test reports
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by the Solenis Environmental Health and Safety Department.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists
BEI : Biological Exposure Index
CAS : Chemical Abstracts Service (Division of the American Chemical Society).
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
FG : Food grade
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
H-statement : Hazard Statement
IATA : International Air Transport Association.
IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).
ICAO : International Civil Aviation Organization
ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”
IMDG : International Maritime Code for Dangerous Goods
ISO : International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population
LDxx : Lethal Dose, for xx percent of test population.
ICxx : Inhibitory Concentration for xx of a substance
Ecxx : Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD : Organization for Economic Co-operation and Development
OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic
PPE : Personal Protective Equipment

STEL : Short-term exposure limit
STOT : Specific Target Organ Toxicity
TLV : Threshold Limit Value
TWA : Time-weighted average
vPvB : Very Persistent and Very Bioaccumulative
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act
DOT : Department of Transportation
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC : Hazardous Materials Information Review Commission
HMIS : Hazardous Materials Identification System
NFPA : National Fire Protection Association
NIOSH : National Institute for Occupational Safety and Health
OSHA : Occupational Safety and Health Administration
PMRA : Health Canada Pest Management Regulatory Agency
RTK : Right to Know
WHMIS : Workplace Hazardous Materials Information System

Spectrum Water Technology

SAFETY DATA SHEET

Revision Date: 11/09/2018
Print Date: 1/15/2019
SDS Number: 000000122656
Version: 1.21

SWT6340E

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Spectrum Water Technology 6135 Industrial Drive Geismar, LA 70734	Contact us at Telephone number	www.spectrumwater.com 1-225-647-3565
Product name	SWT6340E	

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, viscous, white

WARNING! MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to

cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:, Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Lack of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), Convulsions, coma, skin blistering

Target Organs

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, mild, reversible liver effects

Carcinogenicity

This material is not listed as carcinogenic by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). This product (or a component) is a petroleum-derived material. Similar materials and certain compounds occurring naturally in petroleum oils have been shown to cause skin cancer in laboratory animals following repeated exposure without washing or removal. Good industrial hygiene practices are recommended to minimize exposure.

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
ALIPHATIC HYDROCARBON	254504001-5164	>=20-<30%
POLYMER	254504001-5817	>=1-<1.5%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

Treatment: No hazards which require special first aid measures.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO2), Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, Hydrocarbons, Nitrogen oxides (NOx)

Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Material can create slippery conditions.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). The area should be thoroughly flushed with water and scrubbed to remove residue. If slipperiness remains, apply more dry-sweeping compound.

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. This material is slippery when wet.

Storage

Store in a cool, dry, ventilated area. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

ALIPHATIC HYDROCARBON		**254504001-5164**	
ACGIH	time weighted average	200 mg/m3	Non-aerosol
NIOSH	Recommended exposure limit (REL):	100 mg/m3	

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist. Maintain eye wash station near work area.

Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.
Wear resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	viscous
Color	white, milky
Odor	mild, hydrocarbon-like
Melting point/range	0 °F / -18 °C
pH	6 - 8
Flash point	> 200.1 °F / > 93.4 °C
Evaporation rate	(<)1
Density	(Approximate) 1.05 g/cm3

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Heat, flames and sparks.

Incompatible products

oxidizers, Strong acids, Strong bases, Strong oxidizing agents, strong reducing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, Hydrocarbons, Nitrogen oxides (NOx)

Hazardous reactions

Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Inhalation Skin absorption Skin contact Eye Contact Ingestion

Product

Acute oral toxicity	:	No data available
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	No data available
Respiratory or skin sensitisation	:	No data available
Target Organ Systemic Toxicant - Repeated exposure	:	Target Organs: Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, mild, reversible liver effects
Aspiration toxicity	:	The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Components:

ALIPHATIC HYDROCARBON:

Acute oral toxicity	:	LD 50 Rat: > 5,000 mg/kg
Acute inhalation toxicity	:	LC 50 Rat, male and female: > 5.28 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 No adverse effect has been observed in acute inhalation toxicity tests.
Acute dermal toxicity	:	LD 50 Rabbit: > 2,000 mg/kg No adverse effect has been observed in acute dermal toxicity tests.
STOT - single exposure	:	Assessment: May cause drowsiness or dizziness.

POLYMER:

Acute oral toxicity	:	The component/mixture is classified as acute oral toxicity, category 4.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Product:

Toxicity to fish	:	LC 50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Test substance: Polymer Method: OECD Test Guideline 203 Test conducted using environmentally representative water.
Toxicity to daphnia and other aquatic invertebrates	:	EC 50 (Water flea (Daphnia magna)): > 100 mg/l Exposure time: 48 h Test substance: Polymer Method: OECD Test Guideline 202 Test conducted using environmentally representative water.
Toxicity to algae	:	IC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Test substance: Polymer Method: OECD Test Guideline 201 Test conducted using environmentally representative water.

Components:

ALIPHATIC HYDROCARBON:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l Exposure time: 96 h Test Method: semi-static test Test substance: WAF Method: OECD Test Guideline 203 Information given is based on data obtained from similar substances.
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Water flea (Daphnia magna)): 1.4 mg/l Exposure time: 48 h Test Method: static test Test substance: WAF Method: OECD Test Guideline 202 Information given is based on data obtained from similar substances.
Toxicity to algae	:	EL50 (Pseudokirchneriella subcapitata (green algae)): > 1 - 3 mg/l Exposure time: 72 h Test Method: static test Test substance: WAF Method: OECD Test Guideline 201 Information given is based on data obtained from similar substances.
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEL: 0.48 mg/l Exposure time: 21 d Species: Water flea (Daphnia magna) Test Method: semi-static test Test substance: WAF Method: OECD Test Guideline 211 Information given is based on data obtained from similar substances.

Persistence and degradability

Product:

No data available

Components:

ALIPHATIC HYDROCARBON:

Biodegradability : Result: Inherently biodegradable
Biodegradation: 58.6 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

POLYMER:

Biodegradability : Biodegradation: > 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301E
Information given is based on data obtained from similar substances.

Bioaccumulative potential

Product:

No data available

Components:

No data available

Mobility in soil

Product:

No data available

Components:

No data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.	

SARA Hazard Classification
SARA 311/312 Classification
Fire Hazard
Acute Health Hazard

SARA 313 Component(s)
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

New Jersey RTK Label Information

WATER	7732-18-5
POLYMER	254504001-5181
ALIPHATIC HYDROCARBON	254504001-5164
ESTER	254504001-5414
POLYMER	254504001-5817

Notification status

US. Toxic Substances Control Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
Japan. Kashin-Hou Law List	n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)

	HMIS	NFPA
Health	2	2
Flammability	1	1
Physical hazards	0	
Instability		0
Specific Hazard	--	--

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by the Solenis Environmental Health and Safety Department.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :
ACGIH : American Conference of Industrial Hygienists
BEI : Biological Exposure Index
CAS : Chemical Abstracts Service (Division of the American Chemical Society).
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
FG : Food grade
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
H-statement : Hazard Statement
IATA : International Air Transport Association.
IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).
ICAO : International Civil Aviation Organization
ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”
IMDG : International Maritime Code for Dangerous Goods
ISO : International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population
LDxx : Lethal Dose, for xx percent of test population.
ICxx : Inhibitory Concentration for xx of a substance
Ecxx : Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD : Organization for Economic Co-operation and Development
OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic
PPE : Personal Protective Equipment
STEL : Short-term exposure limit
STOT : Specific Target Organ Toxicity
TLV : Threshold Limit Value
TWA : Time-weighted average
vPvB : Very Persistent and Very Bioaccumulative
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act
DOT : Department of Transportation
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC : Hazardous Materials Information Review Commission
HMIS : Hazardous Materials Identification System
NFPA : National Fire Protection Association
NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration
PMRA : Health Canada Pest Management Regulatory Agency
RTK : Right to Know
WHMIS : Workplace Hazardous Materials Information System

Spectrum Water Technology
A DIVISION OF SPECTRUM BIOTECHNOLOGIES

Safety Data Sheet
SWT 9050

1. Identification

Product Name:	**SWT 9050**
Generic Name:	Organic Defoamer/Antifoam
Use & Restrictions:	Antifoam / Defoamer
Manufacturer:	Spectrum Water Technology 218 West Eastbank St. Gonzales, LA 70737 Phone: (225) 647-3565 - Fax: (225) 647-3566
EMERGENCY CONTACT:	(225) 647-3565

2. Hazard(s) Identification

Hazard Classification:	HNOC: This product is considered a hazardous chemical according to OSHA GHS Hazard Communication regulation 29 C.F.R. § 1910.1200.
Signal Word:	NA
Hazard Statement(s):	NA
Precautionary Statement(s):	
Prevention	NA
Response	NA
Storage	NA
Disposal	NA
Hazards not otherwise classified (HNOC)	Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.

3. Composition/Information on Ingredients

The composition is being withheld as a proprietary trade secret. Bona fide requests for disclosure to medical personnel must be made in accordance with the procedures in 29 C.F.R. § 1910.1200(i)1-13.

4. First-aid measures

Skin:	Wash exposed areas with soap and water. Remove contaminated clothing while washing continuously. Discard contaminated clothing and shoes.
Eyes:	Flush eyes with gently flowing water for a minimum of fifteen minutes. Check for and remove contact lenses. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. If irritation develops, seek medical attention immediately.
Ingestion:	If swallowed, dilute with two glasses of water. Seek medical attention immediately. INDUCE VOMITING ONLY UPON ADVICE OF A PHYSICIAN. Never give anything by mouth if victim is unconscious or having convulsions.
Inhalation:	Move victim to fresh air. Assist in breathing, if necessary, and seek immediate medical attention.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media
This product will ignite when exposed to an ignition source while at a temperature at or above its flash point. Use carbon dioxide, dry chemical or alcohol-type foam or universal-type foams to extinguish flames. Water spray may be used to cool fire-exposed containers.

Hazards arising from product
Thermal breakdown of this product will evolve the following decomposition products: fumes, smoke, carbon monoxide, carbon dioxide and traces of incompletely burned hydrocarbon compounds. Overexposure to the products of combustion may result in respiratory irritation.

Protective equipment and precautions for fire-fighters
Wear self-contained breathing apparatus and protective clothing when combating a chemical fire in a confined area.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures
Remove spills promptly as they may make floors slippery. Several washes and/or the use of detergents may be necessary to completely clean any spill. Wear recommended protective equipment outlined in Section 8 of this document and provide adequate ventilation during clean-up.

Methods and materials for containment and cleaning up
Spills should be contained, solidified with absorbent, noncombustible material and placed in labeled containers for disposal. Material should be disposed of at a licensed facility. As supplied, this material is not regulated by RCRA or CERCLA.

7. Handling and storage

Precautions for safe handling
Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Wash thoroughly after handling. Ensure that containers are properly secured prior to moving.

Safe Storage Conditions & Incompatibilities
Keep container closed during any storage. Protect from moisture and foreign materials. Keep away from heat, sparks, and open flames. Avoid direct sunlight. Store away from combustible materials. For optimum storage conditions, store between 45°F and 100°F.

8. Exposure controls/personal protection

Component	OSHA PEL	ACGIH TLV
Severely Refined Mineral Oil	5 mg/m³ (Mist) 8 Hours	5 mg/m³ (Inhalable fraction) 8 Hours

Engineering Controls: Control airborne concentrations below the exposure guideline. General Ventilation is recommended.

Eye protection: Safety glasses with side shields are recommended as a minimum, but chemical goggles or a face shield provide better protection.

Skin protection: Skin contact should be minimized. Wash all affected areas prior to eating and at completion of handling. Contaminated clothing should be removed at completion of handling. Impervious gloves (butyl, neoprene, nitrile), coveralls or apron and boots are recommended.

Respiratory protection: If proper ventilation is unavailable, use an NIOSH approved air-purifying respirator.

9. Physical and chemical properties

Appearance:	Tan to pale amber opaque liquid
Odor:	Mild odor
Odor threshold:	ND
pH:	5.0 - 6.5 (1% Solution)
Melting point:	ND
Freezing point:	ND
Initial boiling point:	ND
Boiling range:	ND
Flash point:	>149°C (>300°F) Setaflash Closed Tester ASTM D3278
Evaporation rate:	ND
Flammability (solid, gas):	Non-Flammable liquid
Upper/lower flammability or explosive limits:	ND
Vapor pressure:	<1.0 mm Hg @ 20°C
Vapor density:	ND
Relative density:	0.9397 g/ml
Solubility(ies):	Dispersible in H2O
Partition coefficient: n-octanol/water:	ND
Auto-ignition temperature:	ND
Decomposition temperature:	ND
Viscosity @25°C:	1000 - 1700 cps (Brookfield RVT)
Pour Point:	15 °F

10. Stability and reactivity

Reactivity:	Non-reactive product under normal use conditions.
Chemical stability:	Stable when used under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization will not occur under normal use conditions.
Conditions to avoid:	Heat, sparks and open flames.
Incompatible materials:	Strong acids, alkalis and strong oxidizing agents.
Hazardous decomposition products:	Not anticipated under normal use conditions...

11. Toxicological information

Routes of Exposure & Effects

Skin	Acute:	May cause mild skin irritation and defatting of the skin.
	Chronic:	Prolonged or repeated contact can de-fat the skin and lead to irritation, cracking and/or dermatitis.
Eyes	Acute:	May cause mild transient irritation, redness and/or tearing.
	Chronic:	No chronic effects anticipated.
Ingestion	Acute:	May result in nausea/intestinal discomfort.
	Chronic:	No chronic effects anticipated.
Inhalation	Acute:	Irritating to mouth, throat and stomach
	Chronic:	No chronic effects anticipated.

Carcinogenic, mutagenic and reprotoxic information:

Reproductive Effects:	None Known
Mutagens:	None Known
Carcinogens(NTP, IARC, OSHA):	None Known. Oil contains less than 3% DMSO extract as measured by IP 346.

12. Ecological information

No data available at date of publish.

13. Disposal considerations

If product is discarded as supplied it is not considered a hazardous waste under RCRA, 40 CFR 261. Please dispose of in accordance with all local, state and federal regulations. It is recommended that the waste be incinerated or land filled at a licensed facility. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product.

14. Transport information

Department of Transportation:	Not Regulated
TDG (Transportation of Dangerous Goods):	Not Regulated

15. Regulatory information

U.S. Regulatory Information:

SARA 302 Threshold Planning Quantity:	NA
SARA 304 Reportable Quantity:	NA
SARA 311/312 Categories:	Acute
SARA 313 Supplier notification:	As supplied, no chemical in this product exceeds the de minimis reporting level established by SARA Title III, Section 313 and 40 CFR 372.
CERCLA	As supplied, no chemical in this product is subject to the reporting requirements of CERCLA.

Listed on or exempt from the following national chemical inventories:

USA (TSCA)
Canada (DSL)
Europe (EINECS)
Australia (AICS)
Korea (KECL)
Japan (ENCS)
China (IECSC)
Philippines (PICCS)
New Zealand (NZIoC)
Taiwan (ECN)
Switzerland (ChemO)

16. Other information

Date: 2/20/19

HMIS:

Health	1	Flammability	1	Physical Hazard	0	Personal Protection	B

Legend:

CASRN Chemical Abstracts Service Registry Number
OSHA Occupational Safety & Health Administration
PEL Permissible Exposure Limit
ACGIH American Conference of Governmental Industrial Hygienists
TLV Threshold Limit Values
NA Not Applicable
ND Not Determined and/or No Data Available
NTP National Toxicology Program
IARC International Agency for Research on Cancer
SARA Superfund Amendments and Reauthorization Act
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
TSCA Toxic Substances Control Act

SAFETY DATA SHEET
SWT Bleach

1. Identification

Product identifier **SWT Bleach**

Other means of identification None.

Recommended use ALL PROPER AND LEGAL PURPOSES

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Spectrum Water Technology

Address 6135 Industrial Drive
Geismar, LA 70734

Telephone 225.647.3565

Website www.spectrumwater.com

Emergency phone number 1.800.424.9300 CHEMTREC 24 HOURS
CCN726304

2. Hazard(s) identification

Physical hazards

Health hazards	Not classified.	Category 1
	Acute toxicity, dermal	Category 1A
	Skin corrosion/irritation	Category 1
Environmental hazards	Serious eye damage/eye irritation	Category 1
	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	
OSHA defined hazards	Not classified.	

Label elements

Signal word Danger

Hazard statement Fatal in contact with skin. Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Take off immediately all contaminated clothing and wash it before reuse. Collect spillage.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number
CHLORINE		7782-50-5
SODIUM HYDROXIDE (NA(OH))		1310-73-2

Other components below reportable levels

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed
Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information
Take off immediately all contaminated clothing. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Discard any shoes or clothing items that cannot be decontaminated.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (C02).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
CHLORINE (CAS 7782-50-5)	Ceiling	3 mg/m3
		1 ppm
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
CHLORINE (CAS 7782-50-5)	STEL	1 ppm
	TWA	0.5 ppm
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
CHLORINE (CAS 7782-50-5)	Ceiling	1.45 mg/m3
		0.5 ppm
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form	Liquid.
Color	Colorless to pale yellow
Odor	CHLORINE
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	10 °F (-12.22 °C)
Initial boiling point and boiling range	414.89 °F (212.72 °C) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	934.38 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	10.14 lbs/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	78 % estimated
Specific gravity	1.22

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong acids. Ammonia.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Fatal in contact with skin. Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Fatal in contact with skin.

Components	Species	Test Results
CHLORINE (CAS 7782-50-5)		
Acute		
Inhalation		
LC50	Mouse	137 ppm, 1 Hours

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
CHLORINE (CAS 7782-50-5)			
Aquatic			
Fish	LC50	Atlantic silverside (Menidia menidia)	0.037 mg/l, 96 hours
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/natio nal/inte rnationa l regulations.

Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1791
UN proper shipping name	HYPOCHLORITE SOLUTION
Transport hazard class(es)	
Class	8
Subsidiary risk	
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	154

DOT information on packaging may be different from that listed.

DOT

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

CHLORINE (CAS 7782-50-5)	Listed.
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)	Listed.

SARA 304 Emergency release notification

CHLORINE (CAS 7782-50-5)	10 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
CHLORINE	7782-50-5	10	100 lbs		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number
CHLORINE	7782-50-5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

CHLORINE (CAS 7782-50-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

CHLORINE (CAS 7782-50-5)

Safe Drinking Water Act (SOWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CHLORINE (CAS 7782-50-5)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. Massachusetts RTK - Substance List

CHLORINE (CAS 7782-50-5)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. New Jersey Worker and Community Right-to-Know Act

CHLORINE (CAS 7782-50-5)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. Pennsylvania Worker and Community Right-to-Know Law

CHLORINE (CAS 7782-50-5)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. Rhode Island RTK

CHLORINE (CAS 7782-50-5)
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

'A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 02/25/2016

Revision date 02/25/2016

Version # 2.1

HMIS® ratings	Health: 4 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 4 Flammability: 0 Instability: 0
Disclaimer	Spectrum Water Technology cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. This document has undergone significant changes and should be reviewed in its entirety. END OF SDS

VEOLIA

SAFETY DATA SHEET
THERMOFLO* 7015

1. Identification

Product identifier	**THERMOFLO 7015**
Other means of identification	None.
Recommended use	Deposit control agent
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements

Signal word	Warning
Hazard statement	May be corrosive to metals.
Precautionary statement	
Prevention	Keep only in original container.
Response	Absorb spillage to prevent material damage.
Storage	Store in corrosive resistant/ container with a resistant inner liner.
Disposal	Dispose of waste and residues in accordance with local authority requirements. Dispose of contents/container to approved local facility. Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Do not freeze.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Chemical resistant gloves.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A respiratory protection program that meets OSHA's 29 CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid
Physical state	Liquid.
Form	Liquid.
Color	Yellow
Odor	Slight sweet
Odor threshold	Not available.
pH (concentrated product)	Not available.
Melting point/freezing point	26 °F (-3 °C)
Initial boiling point and boiling range	210 °F (99 °C)
Flash point	> 212 °F (> 100 °C) P-M(CC)
Evaporation rate	< 1 (Butyl acetate = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1 (Air = 1)
Relative density	1.21
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	38 cps
Viscosity temperature	70 °F (21 °C)
Other information	
pH in aqueous solution	11.2 (5% SOL.)
Pour point	23 °F (-5 °C)
VOC	0 % (Calculated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability	Not available.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Not available.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
THERMOFLO 7015		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Based on available data, the classification criteria are not met.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results
Aquatic			
Crustacea	0% Mortality	Daphnia magna	1000 mg/L, 48 hour
Fish	0% Mortality	Fathead Minnow	1000 mg/L, 48 hour

Persistence and degradability No data is available on the degradability of this product.

No data is available on the degradability of this product.

- **COD (mgO2/g)** 241 (calculated data)
- **BOD 5 (mgO2/g)** 12 (calculated data)
- **BOD 28 (mgO2/g)** 35 (calculated data)
- **Closed Bottle Test (% Degradation in 28 days)** 10 (calculated data)
- **Zahn-Wellens Test (% Degradation in 28 days)** 3 (calculated data)
- **TOC (mg C/g)** 79 (calculated data)

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

- **UN number** UN1824
- **UN proper shipping name** Sodium hydroxide solution
- **Transport hazard class(es)**
  - **Class** 8
  - **Subsidiary risk** -
- **Packing group** III
- **Environmental hazards** No.
- **ERG Code** 154
- **Special precautions for user** Not available.

IMDG

- **UN number** UN1824
- **UN proper shipping name** SODIUM HYDROXIDE SOLUTION
- **Transport hazard class(es)**
  - **Class** 8
  - **Subsidiary risk** -
- **Packing group** III
- **Environmental hazards**
  - **Marine pollutant** No.
- **EmS** F-A, S-B
- **Special precautions for user** Not available.

IATA; IMDG

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Corrosive to metal

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Dec-11-2014
Revision date	Feb-11-2023
Version #	1.2
NFPA ratings	Health: 0 Flammability: 0 Instability: 0
NFPA ratings	
List of abbreviations	CAS: Chemical Abstract Service Registration Number TSRN indicates a Trade Secret Registry Number is used in place of the CAS number. ACGIH: American Conference of Governmental Industrial Hygienists NOEL: No Observed Effect Level STEL: Short Term Exposure Limit LC50: Lethal Concentration, 50% LD50: Lethal Dose, 50% TWA: Time Weighted Average BOD: Biochemical Oxygen Demand COD: Chemical Oxygen Demand TOC: Total Organic Carbon IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods Code
References:	No data available
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).

* Trademark of Veolia. May be registered in one or more countries.

SAFETY DATA SHEET

Section 1. Identification

Product name : 32% UREA Solution

Product code : PFRUREA32

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Not available.

Print date : 1/9/2023

Validation date : 1/9/2023

Version : 1.02

Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Urea	30 - 40	57-13-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : carbon dioxide,carbon monoxide,nitrogen oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Urea	**OARS WEEL (United States, 1/2021).** TWA: 10 mg/m³, 0 times per shift, 8 hours.

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Hand protection : Chemical-resistant gloves.

Skin protection : Wear long sleeves to prevent repeated or prolonged skin contact.

Respiratory protection : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Clear.]

Color : Colorless.

Odor : Amine

Odor threshold : Not available.

pH : 10

: Neat - without dilution.

Melting point/freezing point : Not available.

Initial Boiling Point : Not available.

Section 9. Physical and chemical properties

Boiling point, initial boiling point, and boiling range : >100°C (>212°F)

Flash point : Closed cup: >100°C (>212°F) [Other]

Burning time : Not applicable.

Burning rate : Not applicable.

Evaporation rate : Not available.

Flammability : Slightly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : Not available.

Relative density : 1.09 (15.6°C)

Density : 9.0797 (lbs/gal)

Solubility in water : Soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

VOC : Not available.

Pour Point : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials. Incompatible with all hypochlorites

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Urea	LD50 Oral	Rat	8471 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

No available toxicity data.

Sensitization

No available toxicity data.

Mutagenicity

No available toxicity data.

Carcinogenicity

Classification

No available toxicity data.

Reproductive toxicity

No available toxicity data.

Teratogenicity

No available toxicity data.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Urea	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Section 11. Toxicological information

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Urea	8471	Not available.	Not available.	Not available.	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Urea	Acute EC50 3910000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1000 mg/l Marine water	Crustaceans - Chaetogammarus marinus - Young	48 hours
	Acute LC50 22.5 ppt Fresh water	Fish - Oreochromis mossambicus - Young	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Urea	<-1.73	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

DOT Reportable Quantity Not applicable.

Marine pollutant Not available.

North-America NAERG : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export**: No products were found.
TSCA 12(b) annual export notification: No products were found.
United States inventory (TSCA 8b): All components are active or exempted.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : Not applicable.

Section 15. Regulatory information

SARA 313

Supplier notification : No products were found.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Canada

Canada (CEPA DSL): : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)

History

Date of printing : 1/9/2023

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.

ATTACHMENT T-5
Valero Port Arthur Refinery
Treatment Chemicals

Product	Use	Chemicals Listed in SDS [CAS]	Aquatic Toxicity Data in SDS	Persistence / Bioaccumulative Data in SDS
Bleach	Cleaner	Sodium hypochlorite [7681-52-9] Sodium hydroxide [1310-73-2]	Yes	No
BPC 67335	Corrosion inhibitor	Phosphonocarboxylic acid salt [Trade Secret] Modified arylamine [Trade Secret] Soidum molybdate [7631-95-0] Sodium hydroxide [1310-73-2]	Yes	No
BPW 76091	Water clarifier	Aluminum salt [Trade Secret] Alkylamine polymer [Trade Secret]	Yes	No
BPW 76910	Antifoam	Paraffinic petroleum distillate [64742-55-8] Petroleum distillates [64742-53-6] A polyether [Trade Secret] Kerosene (petroleum) [8008-20-6] Ethoxylated oxtylphenol [Trade Secret] Fatty acid [57-11-4] Naphthalene [91-20-3]	Yes	Yes
Cortrol IS1050	Oxygen scavenger	Cobalt sulphate [10124-43-3]	Yes	Yes
Cortrol OS5700	Oxygen scavenger	Hydroxypropyl hydroxylamine [97173-34-7] N,N-Diethylhydroxylamine [3710-87-7]	Yes	Yes
Bright Dyes FLT Yellow-Green	Water tracing, leak detection hydrostatic testing	No hazardous ingredients listed	No	No
Bright Dyes Standard Blue	Water tracing, leak detection hydrostatic testing	No hazardous ingredients listed	No	No
DCI-4A	Corrosion inhibitor	Xylene [1330-20-7] Ethylbenzene [100-41-4]	Yes	Yes
Depositrol SF5109	Deposit control agent	Alcohols, C12-C15, ethoxylated propoxylated [68551-13-3]	Yes	Yes
FloGard MS6206	Corrosion inhibitor	Tetrapotassium pyrophosphate [7320-34-5]	Yes	No
FloGard MS6210	Corrosion inhibitor	Phosphoric acid [7664-38-2] Zinc bis (dihydrogen phosphate) [13598-37-3] Zinc sulfate [7733-02-0]	Yes	No
FoamTrol AF1440	Antifoam	Distillates(petroleum, hydrotreated middle [64742-46-7] Fatty acid ethoxylate [61791-00-2] Fatty acids, C16-18 [67701-03-5]	Yes	Yes
FoamTrol AF2211	Antifoam	No hazardous ingredients listed	Yes	Yes
GENGARD GN8020	Deposit control agent	Maleic acid [110-16-7] Carboxylic acid polymer [TSRN 125438-5052P]	Yes	Yes
GENGARD GN8203	Deposit control agent	Sodium hydroxide [1310-73-2] Chlorotolytriazole sodium salt [202420-04-0]	Yes	Yes
Hidacid Azure Blue	Algal Control	No hazardous ingredients listed	Yes	Yes
Hydrogen Peroxide 50%	Supplemental oxygen	Hydrogen peroxide [7722-84-1]	Yes	Yes
Inhibitor AZ8104	Corrosion inhibitor	Chlorotolytriazole sodium salt [202420-04-0] Dichlorotolyltriazole [N/A] Sodium 4 (or 5)-methyl-1H-benzotriazolide [64665-57-2] Sodium hydroxide [1310-73-2]	Yes	Yes
Inhibitor ECP8130	Corrosion Inhibitor	Sodium hydroxide [1310-73-2] Halogenated aromatic heterocycle [TSRN 125438-7795]	Yes	Yes
Klaraid IC1172	Clarification aid	No hazardous ingredients listed	Yes	No
Klaraid PC1192	Coagulant	No hazardous ingredients listed	Yes	Yes
Kleen AC9502	Metal cleaner	Citric acid [77-92-9]	Yes	Yes
M-I Gel	TSS settling aid	Crystalline silica [14808-60-7]	No	No
OLI 8000	Lubricity improver	Organic acid [61790-12-3]	Yes	Yes
PFR2271	pH control	Sulfuric acid [7664-93-9]	Yes	No
Phosphoric Acid 85%	Nutrient	Phosphoric acid [7664-38-2]	No	No
Solus AP25	Internal steam drum treatment	Sodium hydroxide [1310-73-2]	Yes	No
Spectraclear 509	Water clarifier	Aluminum chloride hydroxide [12042-91-0]	Yes	No
Spectrafloc 650	Flocculant	Petroleum distillated [64742-47-8] Alkoxylated alcohol [Trade Secret]	Yes	Yes
Spectrafloc 680	Additive	Petroleum distillates [64742-47-8] Alkoxylated alcohol [Trade Secret] Adipic acid [124-04-9]	Yes	Yes
Spectrafloc 875	Water clarifier	Petroleum distillates [64742-47-8] Alkoxylated alcohol [Trade Secret]	Yes	Yes
Stadis 450	Conductivity improver	Toluene [108-88-3] Heavy aromatic naphtha [64742-94-5] Dinonylnaphthalenesulfonic acid [25322-17-2] Isopropanol [67-63-0] Naphthalene [91-20-3]	Yes	No
Spectrus BD1501E	Biodispersant	Alcohols, C10, alkoxylated [166736-08-9]	Yes	No
Spectrus NX1100	Biocide	2-Bromom-2-nitropropane-,3-diol (Bronopol) [52-51-7] Magnesium nitrate [10377-60-3] Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one [55965-84-9] Magnesium chloride [7786-30-3]	Yes	Yes
Spectrus NX1106	Microbial control agent	Magnesium nitrate [10377-60-3] Mixture of: 5-choro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one [55965-84-9]	Yes	No
Spectrus OX103	Biocide	Bromo-chloro, 5,5-dimethyl hydantoin [32718-18-6]	Yes	Yes
Steamate LSA1901	Steam condensate treatment	Dimethylaminoethanol (DMAE) [108-01-0] Methoxypropylamine, 3- [5332-73-0]	Yes	No
SWT 201	Coagulant	Sulfuric acid, aluminum salt [10043-01-3]	Yes	No
SWT 1200	Coagulant	Aluminum chloride, basic [1327-41-9] Phosphoric acid [7664-38-2]	No	No
SWT 1315	Coagulant	Aluminum chloride, basic [1327-41-9] Quaternary ammonium polymer [N/A]	No	No
SWT 1340	Coagulant	Aluminum chloride, basic [1327-41-9] Quaternary ammonium polymer [N/A]	No	No
SWT 2030	TSS settling aid	No hazardous ingredients listed	Yes	No
SWT 5395X	Flocculant	Aliphatic hydrocarbon [254504001-5164]	Yes	No
SWT 6340E	Flocculant	Aliphatic hydrocarbon [254504001-5164] Polymer [254504001-5817]	Yes	Yes
SWT 9050	Clarifier bed compaction aid	N/A	No	No
SWT Bleach	Disinfection	Chlorine [7782-50-5] Sodium hydroxide [1310-73-2]	Yes	No
ThermoFlo 7015	Deposit control agent	No hazardous ingredients listed	Yes	Yes
Urea Solution	Biomass nutrient	Urea [57-13-6]	Yes	Yes

ATTACHMENT W2-1
Analytical Laboratories
(Outfall Samples)

Parameters	Laboratory
Cyanide	Eurofins Pittsburgh 301 Alpha Drive Pittsburgh, PA 15238
Chlorobiphenyls	ALS Canada Ltd. Burlington Environmental 1435 Norjohn Court, Unit 1 Burlington, Ontario L7L 0E6 Canada
Dioxins/furans	ALS Environmental – Houston 10450 Stancliff Road, Suite 210 Houston, TX 77099
Mercury, surfactants, total Kjeldahl nitrogen	Summit Environmental Technologies, Inc. 3310 Win Street Cuyahoga Falls, OH 44223
Nonylphenol	A&B Labs 10100 East Freeway, Suite 100 Houston, TX 77029
All other analytes	Earth Analytical Sciences, Inc. 4825 Ward Drive Beaumont, TX 77705

SECTION NO. 7

SECTION NO. 6

SECTION NO. 8

JEFFERSON COUNTY DRAINAGE DISTRICT NO. 7

MAIN OUTFALL CANAL

INTAKE CANAL

TAYLOR

KNOCK ENGINE FACILITY BLDG. 56

SCOT 2

SCOT 1

SRU 8745

SRU 8743

SWS 8746

HU 2244

WWTU 8746

OLD INDUSTRIAL TREATMENT WASTEWATER POND

FILLED IN STORM SURGE BASIN NO.2 (1992)

SALTGRASS SUBSTATION

HU 2243

POWER PLANT NO.1

FCCU 7044

FGRU 7044

HDU 7044

FCCU 1241

SGRU 1242

AVU 1240

GFU 0244

HU 2242

POWER PLANT NO. 4

HDU 7045

RSU 1742

CPU 1344

HEAT EX

STATE HIGHWAY NO. 87

OFFICE 54

BLDG. 601

BLDG. 600

CENTRALIZED SHOPS

OFFICE NO. 36

LAB

FIRE STATION

CCS3

WAREHOUSE NO. 1

OFFICE NO. 50

SRU-0645

SWS 8748

SRU-0646

HDU 8742

PLANT NO.6

SHT 2242

AVU 8242

SRU 8242

FGRU 8242

ATU 2844

SHT 8246

HCU 843

SGRU 2846

ATU 2843

DCU 843

DCU 844

WWU21

WRU 8843

HVRU 8841

CO-1

CO-2

CO-3

CO-3A

CO-3B

CO-4

CO-5

CO-6

CO-7

CO-8

CO-9

TOWER 1

TOWER 2

DOCK OFFICE

TURNING BASIN

BAYOU

STATE HIGHWAY NO. 87

CHEVRON LUBRICANTS

PACKAGE WAREHOUSE

WEST SEVENTH STREET

WEST SEVENTH STREET

ROAD TO BEAUMONT - HOUSTON - FORT WORTH - DALLAS

SPUR 214 (HWY 82)

STATE HIGHWAY 82

FIRE 0054

WWTP 0056

ECO 0055

RGU 0057

V2\MAPS\OVERALL.DWG MARCH 22, 2017

OVERALL MAP

Valero
Port Arthur Refinery
Port Arthur, Texas

V2\MAPS\OVERALL.DWG

Table 2. Outfall Wastewaters

Outfall	Wastewaters	Daily Average Flow	
		gpm	MGD
001	Wastewaters subject to effluent guidelines at 40 CFR 419, Subcategory C*		
	Refinery wastewater (process, utility)	6,005	8.647
	Ballast water	50	0.072
	Crude tank drawoff	100	0.144
	Boiler blowdown	475	0.684
	Primary process area stormwater	641	0.924
	Other wastewaters**		
	Stormwater from other areas	15,098	21.741
	Hydrogen plant utility wastewaters	38	0.055
	Sanitary	110	0.158
	Water treatment	400	0.576
	Total	22,917	33.000
004, 005A/B/C, 010	Stormwater (including construction stormwater), utility wastewater, hydrostatic test water	Intermittent and variable	
006, 008, 011, 012, 013, 014	Stormwater (including construction stormwater), hydrostatic test water	Intermittent and variable	

* Includes remediation wastewater, and wastewater from Chevron Phillips as part of petrochemical operations under refinery effluent guidelines.

** Includes other third party wastewaters.

Valero

September 4, 2024

CERTIFIED MAIL NO. 7022 1670 0001 8504 0472
RETURN RECEIPT REQUESTED

Ms. Rachel Ellis
Water Quality Division (MC-148)
Applications Review and Processing Team
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Re: The Premcor Refining Group Inc. (CN601420748)
Valero Port Arthur Refinery (RN102584026)
TPDES Permit No. WQ0000309000 (EPA ID TX0005991)
Renewal without changes
Response to letter dated August 22, 2024

Dear Ms. Ellis:

The Premcor Refining Group Inc. is in receipt of your August 22, 2024 letter, which requested additional information for the TPDES renewal application for the Valero Port Arthur Refinery that was submitted on August 8, 2024. Below are responses to the requested information.

TCEQ Item 1

1. Thank you for submitting the Domestic Wastewater Permit Application. However, the application has been submitted on an outdated form. According to TCEQ policy, outdated versions of the application forms cannot be used. Please resubmit all pages of the administrative report on the most current version of TCEQ form number 10053.

Response to Item 1

The TCEQ has listed this item in error. The refinery holds an industrial wastewater TPDES permit, so the domestic wastewater permit application is not applicable. Also, the facility's industrial TPDES renewal application was submitted online via the TCEQ's STEERS system and the administrative section of the application does not have a form number.

TCEQ Item 2

The following is a portion of the NORI, which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

Response to Item 2

Edits are marked in the text below, concerning the facility name (Valero Port Arthur Refinery) and location (not in the Port Arthur city limits).

> "APPLICATION. The Premcor Refining Group Inc. P.O. Box 909, Port Arthur, Texas 77641, which owns ~~a petroleum refining~~ **the Valero Port Arthur Refinery**...The facility is located at 1801 South Gulfway Drive, ~~in~~ **near** the city of Port Arthur..."

TCEQ Item 3

The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Response to Item 3

The Spanish NORI is attached and includes the edits noted above.

Please do not hesitate to contact me at 409-985-1354 or Megan.Tawney@valero.com if you have any questions.

Sincerely,

Megan Tawney

Megan Tawney
Sr. Environmental Engineer

Enclosures
Spanish NORI (WQ0000309000 NORI Spanish 8-27-24.docx)

Comisión de Calidad Ambiental del Estado de Texas

AVISO DE RECIBO DE LA SOLICITUD Y
EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA
RENOVACION

PERMISO NO. WQ0000309000

SOLICITUD. Premcor Refining Group Inc., P.O. Box 909, Port Arthur, Texas 77641, propietaria de la Valero Port Arthur Refinery, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) la renovación del Permiso del Sistema de Eliminación de Descargas Contaminantes de Texas (TPDES) No. WQ0000309000 (EPA I.D. No. TX0005991) para autorizar la descarga de aguas residuales tratadas y aguas pluviales a un volumen que no exceda un flujo promedio diario de 33,000,000 galones por día. La planta está ubicada en 1801 South Gulfway Drive, cerca de la ciudad de Port Arthur, en el Condado de Jefferson, Texas 77640. La ruta de descarga es desde el sitio de la planta a través de los Emisarios 001, 005B, 005C, y 006 directamente a la Taylor Bayou Tidal (Jefferson County Drainage District (JCDD) No. 7 Main Outfall Canal) porción de la Intracoastal Waterway Tidal en el Segmento No. 0702 de la cuenca Neches-Trinity Coastal; a través del Emisario 005A a Alligator Bayou (Canal principal D), a través del Emisario 008 a un estanque sin nombre, de ahí a una zanja sin nombre, de ahí a Alligator Bayou (Canal principal D), a través del Emisario 010 a una zanja de refinería, de ahí a Alligator Bayou (Canal principal D), a través de los Emisarios 011 y 012 a un canal sin nombre, de ahí a un estanque sin nombre, de ahí a una zanja sin nombre, de ahí a Alligator Bayou (Canal principal D), de ahí a todos los emisarios de la parte de Taylor Bayou Tidal (JCDD No. 7 Main Outfall Canal) de la Intracoastal Waterway Tidal en el Segmento No. 0702; y a través del Emisario 004 a una zanja sin nombre, de allí a West Basin, y a través de los Emisarios 013 y 014 al JCDD No. 7 Foley Outfall Canal, de ahí todos los emisarios al Sabine-Neches Canal Tidal en el Segmento No. 0703 de la Cuenca Costera Neches-Trinity. La TCEQ recibió esta solicitud el 8 de agosto de 2024. La solicitud de permiso está disponible para leerla y copiarla en la Biblioteca Pública de Port Arthur, 4615 9th Avenue, Port Arthur, en el Condado de Jefferson, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en el siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdesapplications.
Este enlace a un mapa electrónico de la ubicación general del sitio o instalación es proporcionado como una cortesía pública y no forma parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-93.969166,29.855833&level=18

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar comentarios públicos o pedir una reunión pública sobre esta solicitud. El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo

para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. *[For renewal applications that* ***do not*** *include a major amendment, include the following sentence:]* **Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.**

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envia por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Premcor Refining Group Inc. a la

dirección indicada arriba o llamando a Sr. Luke Holloway, Environmental Manager, al 409-985-1011.

Fecha de emisión _____ *[Date notice issued]*