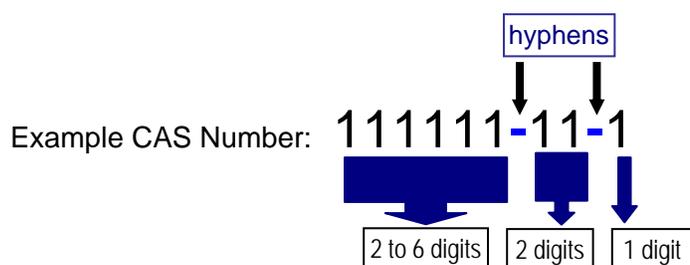


Chemical Abstract Service (CAS) Numbers Information

The CAS Number is one of the fields of information in the Tier2 Submit software program's Chemicals in Inventory module. It is a number assigned to a specific chemical or chemical compound when it becomes registered with the Chemical Abstract Service (CAS), a division of the American Chemical Society. The CAS Number is used in Tier Two reporting because it is:

- a unique numeric identifier,
- it designates only one substance, and
- it serves as a link to a wealth of information about a specific chemical substance.

CAS Number Format: A CAS Registry Number is a numeric identifier that can contain up to 9 digits, divided by hyphens into 3 parts. To be sure that the hyphens are in their proper place in the format, CAS Numbers should always be read **from RIGHT to LEFT**:



So, **if you have a CAS Number that has no hyphens**, follow the format above and move from *right to left*, inserting the first hyphen to the left of the last digit, and then inserting a second hyphen 2 digits to the left of the *first* hyphen.

Example: If the MSDS for Ethanol indicates that the CAS Number is 8024451, then follow the hyphenating format above and enter the CAS # as 8024-45-1.

Why is CAS Number format important?

Within the Tier2 Submit software program, there is a built-in database of chemical names (including chemical name synonyms) that are matched to their corresponding CAS Numbers *in CAS Number format*. Please note that this is a limited database and will not contain every hazardous chemical or hazardous chemical compound that may need to be reported in the electronic Tier Two Report. However, the Tier2 Submit chemical database does contain many of the most common hazardous chemicals that are reported in Tier Two Reports. The database feature allows the user to enter the CAS Number into the CAS # field and then click on the **Lookup Chemical Name** button. If the CAS Number is in the Tier2 Submit database, then this action will pop up a screen containing all the chemical names (synonyms) that correspond to that CAS Number. The user can then pick the chemical name from the pick list by double-clicking on the name choice. This action will insert the selected name into the Chem Name field.

To find the CAS number of a hazardous chemical or the hazardous chemical ingredients in a hazardous chemical mixture, you should always consult the Material Safety Data Sheet (MSDS) for the chemical or product. Please note that for some trade secret formula products, the product MSDS may not provide the CAS numbers for the hazardous ingredients. In such cases, the trade secret formula product should be reported by its **label name** (entered in the Chem Name field in Tier2 Submit) and the CAS # field will have to be left blank.

If you have a single chemical or chemical compound, then the CAS Number can usually be found in either the **Identity** or the **Hazardous Ingredients** sections of the MSDS.

The Chemical Abstract Service has also assigned a single CAS number to each of several chemical products that are common mixtures of chemicals. Some examples of such common mixtures are: Gasoline, Crude oil, Asphalt, Diesel fuel, and Kerosene. If the common mixture has a CAS number assigned to the mixture itself, then a reporting facility will not need to report the CAS Numbers of each chemical or chemical compound within that mixture; rather, the reporting facility will report the common mixture by its mixture name (entered in the Chem Name field in Tier2 Submit) and will give the mixture CAS number in the CAS # field. In these cases, the reporting facility will not need to complete the Mixtures screen in Tier2 Submit's Chemicals in Inventory module.

CAS Numbers for Mixture Reporting: If the mixture has not been assigned its own unique CAS Number by the Chemical Abstract Service, then the product should be reported under its label name (entered into the Chem Name field in Tier2 Submit) and the individual hazardous chemical ingredients should be listed, along with their corresponding CAS Numbers, on the Mixtures screen in Tier2 Submit. The CAS Numbers for each hazardous chemical ingredient in the mixture will usually be found in the **Hazardous Ingredients** section of the product's MSDS.

The Tier II Reporting Program has a link to an Internet site that provides an easy way to look up CAS Numbers for common chemicals and chemical compounds. You may also enter CAS Numbers (in CAS Number format) and look up the corresponding chemical name(s). Click [here](#) to access this site.

<p>If your MSDS for the product does not provide CAS number(s), and you believe that the product is widely distributed, you may want to contact the Tier II Reporting Program for assistance.</p>
