



FACT SHEET

N-HEXANE (HEXANE)

CAS #: 110-54-3

This fact sheet provides a summary of the Development Support Document (DSD) created by the Toxicology Section (TS) of the Texas Commission on Environmental Quality (TCEQ) for the development of Regulatory Guidelines (ESL and ReVs) for ambient exposure to this chemical. For more detailed information, please see the DSD or contact the TS by phone (1-877-992-8370) or e-mail (tox@tceq.texas.gov).

What is hexane?

Hexane (n-hexane) is a colorless liquid with an unpleasant, gasoline-like, odor. Hexane is used as a solvent in the extraction of edible fats and oils in the food industry, as cleaning agents in textile and furniture manufacturing, in the printing industry, and as a base for many commercial products, such as glues, cements, paint thinners, and degreasers. Hexane is also a minor component of crude oil and natural gas. It is also called hexane/mixed isomers, hexanes, dipropyl, gettysolve-b, hex, hexyl hydride, normal hexane, and skellysolve B.

How is hexane released into ambient air?

Hexane may be released into the air by evaporating into the atmosphere during handling, storage in fuel tanks, or through incomplete combustion. It may also be released into the air at places where it is produced or used.

How can hexane affect my health?

Permitted levels of hexane should not cause adverse health and welfare effects. Very few short-term studies have been conducted in laboratory animals or humans due to the relatively non-toxic nature of hexane. Therefore, the TS developed a generic short-term ESL. A generic ESL uses a calculated ratio to estimate a level at which no significant adverse health effects would occur. For more information on the Tier II Generic ESL approach, please see the ESL Guidelines. A significant number of long-term studies have been conducted in laboratory animals and humans. Long-term inhalation exposure to hexane mainly causes numbness in the arms and legs, a condition known as peripheral neuropathy. Hexane has not been classified as a human carcinogen by the TCEQ, the United States Environmental Protection Agency, the National Toxicology Program, and the International Agency for Research on Cancer.

Can hexane cause odors or affect plants?

Hexane can cause an unpleasant, gasoline-like odor. Hexane exposure has not been shown to have adverse effects on plants.

Why does the TCEQ set Regulatory Guidelines for hexane?



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The TCEQ has set various air quality guideline levels (ESLs and ReVs) to protect human health and welfare. Please see Definitions of ESLs, ReVs, and AMCVs located on the TCEQ DSD webpage for more information. The ESLs and ReVs for hexane have been designed to protect the general public from short-term and long-term adverse health and welfare effects. The general public includes children, the elderly, pregnant women and people with preexisting health conditions. If you would like to know more about the specific ESLs and ReVs developed, what the values are and what they are used for, please see the DSD.