FACT SHEET

Heptane, All Isomers

CAS Numbers: n-Heptane: 142-82-5;
Other 8 Isomers

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

What is heptane?

Heptane is a colorless, volatile, flammable organic liquid with a faint hydrocarbon odor. Heptane is a component of natural gas and crude oil (0.1-1.9%). All isomers of heptane are used as solvents for glues, lacquers and inks, as industrial solvent for extracting natural gas, in organic synthesis, as an anesthetic, and are ingredients of gasoline and petroleum solvents.

How is heptane released into ambient air?

Heptane can be released into the air from its production and use in many products associated with the petroleum and natural gas industries. In addition, the combustion of gasoline is a major mechanism for the release of heptane into the atmosphere. Heptane released to the environment is expected to volatilize to the atmosphere, where it will undergo photochemical oxidation reactions.

How can heptane affect my health?

Heptane has a low order of acute or chronic toxicity. Permitted levels of heptane should not cause adverse health and welfare effects. Inhalation of high concentrations of heptane can cause depression of the central nervous system, mucous membrane and sensory irritation, and neurobehavioral impairment. There are no studies indicating heptane has a potential to be a human carcinogen.

Is heptane odorous or harmful to plants?

Heptane has a gasoline-like odor at moderate levels. Heptane has not been shown to have an adverse effect on plants.

Why does the TCEQ set regulatory guidelines for heptane?

The TCEQ has set various air quality guideline levels (ESLs, AMCVs and ReVs) to protect human health and welfare. Please refer to Definitions of ESLs, ReVs, and AMCVs located on the TCEQ DSD webpage for more information. The air quality guideline levels for heptane have been designed to protect the general public from short-term and long-term adverse health and welfare effects. The general public includes sensitive populations such as children, the elderly,

pregnant women and people with preexisting health conditions. If you would like to know more about the specific ESLs, AMCVs and ReVs developed, what the values are and what they are used for, please see the DSD.