FACT SHEET

Nonane, All Isomers

CAS Numbers: n-Nonane: 111-84-2; Other 34 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 nonane?

The 35 isomers of nonane are colorless, highly flammable liquids with a gasoline-like odor. Nonanes are major constituents of gasoline, VM&P naphtha and Stoddard solvents. Nonane is produced commercially by fractional distillation or refining of petroleum. Nonanes are used mainly as a component of the fuel source kerosene, in organic syntheses, and in biodegradable detergents.

How is nonane released into ambient air?

Nonane is released in air primarily from evaporative emissions resulting from manufacturing or using products containing nonane. Nonane released to the environment is expected to volatilize to the atmosphere, where it will undergo photochemical oxidation reactions.

How can nonane affect my health?

Nonane has a low order of short- or long-term toxicity. Permitted levels of nonane should not cause adverse health and welfare effects. Inhalation of high concentrations of nonane may cause depression of the central nervous system. There are no studies indicating nonane has a potential to be a human carcinogen.

Is nonane odorous or harmful to plants?

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

Why does the TCEQ set Regulatory Guidelines for nonane?

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 nonane 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.