

FACT SHEET

2-PENTENE

CAS #: 627-20-3; 646-04-8

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 <u>Regulatory Guidelines</u> (ESL and ReVs) for ambient exposure to this chemical. For more detailed information, please see the <u>DSD</u> or contact the TS by phone (1-877-992-8370) or e-mail (tox@tceq.state.tx.us).

What is 2-pentene?

2-Pentene is a colorless liquid that is used to inhibit polymerization. 2-Pentene occurs as two isoforms, cis-2-pentene and trans-2-pentene. 2-Pentene is also known as β -amylene.

How is 2-pentene released into ambient air?

2-Pentene may be released into the air by companies using polymerization to make their products.

How can 2-pentene affect my health?

Permitted levels 2-pentene should not cause adverse health and welfare effects. Very few studies are available for short-term adverse health effects following inhalation of 2-pentene, because it is relatively non-toxic. 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 <u>ESL Guidelines</u>. The TS did not find any long-term 2-pentene studies in laboratory animals or humans. 2-Pentene has not been classified as a human carcinogen by the TCEQ, the United States Environmental Protection Agency, the National Toxicology Program, or the International Agency for Research on Cancer.

Is 2-pentene odorous or harmful to plants?

The TS did not find any studies that describe the odor of 2-pentene or potential harmful effects in plants.

Why does the TCEQ set Regulatory Guidelines for 2-pentene?

The TCEQ has set various air quality guideline levels (ESLs and ReVs) to protect human health and welfare. Please see the <u>Regulatory Guideline Fact Sheet</u> for more information on ESLs and ReVs. The ESLs for 2-pentene have been designed to protect the general public from short-term and long-term adverse health 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 <u>DSD</u>.

October 2007