

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

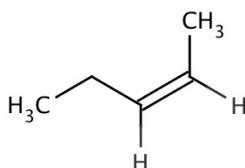
April 23, 2001

TO: File for cis-2-Pentene (CAS No. 627-20-3)
FROM: Michael Depa, Toxics Unit, Air Quality Division
SUBJECT: Development of the Screening Level

The initial threshold screening level (ITSL) for cis-2-pentene is 0.1 $\mu\text{g}/\text{m}^3$ (annual averaging time).

The following references or databases were searched to identify data to determine the screening level: Environmental Protection Agency's (EPA's) Integrated Risk Information System (IRIS), the Registry of Toxic Effects of Chemical Substances (RTECS), the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), National Institute of Occupational Safety and Health (NIOSH) Pocket Guide to Hazardous Chemicals, Environmental Protection Bureau Library, International Agency for Research on Cancer (IARC) Monographs, Chemical Abstract Service (CAS) Online (1967- September 2000), National Library of Medicine (NLM), Health Effects Assessment Summary Tables (HEAST), and National Toxicology Program (NTP) Status Report. The EPA has not established a reference concentration (RfC) or reference dose (RfD) for cis-2-pentene. The ACGIH and NIOSH have not established Occupational Exposure Limits (OELs). The molecular weight is 98 g, and the molecular formula is C_5H_{10} . The molecular structure is pictured in Figure 1. The melting point is -151°C . The boiling point is 3°C . Cis-2-pentene is water soluble and is a flammable liquid. The vapor pressure is 495 mmHg at 25°C .

Figure 1. Molecular Structure of cis-2-Pentene



After performing the standard literature searches no toxicity information was found. Therefore, the ITSL for cis-2-pentene was established at 0.1 $\mu\text{g}/\text{m}^3$ (annual averaging time) based on Rule 232(i).

MD:DB
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