

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

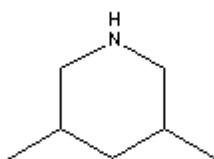
INTEROFFICE COMMUNICATION

TO: File for 3,5-Dimethylpiperidine (CAS No. 35794-11-7)
FROM: Michael Depa, Toxics Unit, Air Quality Division
SUBJECT: Development of the Screening Level
DATE: April 28, 2006

The initial threshold screening level (ITSL) for 3,5-Dimethylpiperidine is 0.1 µg/m³ (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- April 2006), 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 3,5-dimethylpiperidine. The ACGIH and NIOSH have not established Occupational Exposure Limits (OELs). The molecular weight is 113.2 g, and the molecular formula is C₇H₁₅N. The molecular structure is pictured in Figure 1. The boiling point is 144°C. The flash point is 32°C. This compound probably is composed of a cis/trans mixture.

Figure 1. Molecular Structure of 3,5-Dimethylpiperidine (CAS No. 35794-11-7)



After performing the standard literature searches no toxicity information was found. Therefore, the ITSL for 3,5-dimethylpiperidine was established at 0.1 µg/m³ (annual averaging time) based on Rule 232(i).

MD:lh