

MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

INTEROFFICE COMMUNICATION

To: File for Sec-Amyl Acetate (CAS# 626-38-0)
From: George Eurich
Date: 8-30-2011
Subject: Screening level for Sec-Amyl Acetate (CAS# 626-38-0)

The screening level for Sec-Amyl Acetate is 2600 $\mu\text{g}/\text{m}^3$ based on 8 hour averaging.

Physical data: colorless liquid with mild odor and only slight solubility. MW = 130.2

The following references or databases were searched to identify data to determine the screening level: U.S. Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS), National Institute for Occupational Safety and Health (NIOSH) Registry for Toxic Effects of Chemical Substances (RTECS), American Conference of Governmental and Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs-2010), Michigan Department of Natural Resources and Environment (DNRE) library, International Agency for Research on Cancer (IARC) Monographs, Chemical Abstract Service (CAS) online, National Library of Medicine (NLM) - Toxline, and National Toxicology Program (NTP) Status Report.

The AQD established an Interim Initial Threshold Screening Level of 6650 $\mu\text{g}/\text{m}^3$ for Sec-Amyl Acetate in 1992. This compound is also known as 2-Pentanol Acetate, an isomer of pentyl acetate. A subsequent literature review, as noted above, was performed in 2011, and determined that there are no EPA RfD or RfC values for sec amyl acetate, nor are there published toxicity data sufficient to derive a RfC. Of note, differing occupational safety levels were cited by OSHA/NIOSH (REL) and ACGIH (TLV). The NIOSH REL is 125 ppm while the ACGIH TLV is 50 ppm. The ACGIH TLV encompasses all isomers of pentyl acetate and is set to be protective of upper respiratory tract irritation. The ITSL determination as per Rule 336.1232(1)(c):

ITSL = OEL divided by 100
= 50 ppm(130.2)/24.45 \div 100
= (260 mg/m^3)/100
= (2.60 mg/m^3) (1000 $\mu\text{g}/\text{mg}$)

ITSL = 2600 $\mu\text{g}/\text{m}^3$ based on 8 hr avg

References:

ACGIH. 2010. TLVs and BEIs based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices. ACGIH. Cincinnati, OH.