

MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

INTEROFFICE COMMUNICATION

To: **File for Sec-Butanol (CAS# 78-92-2)**

From: George Eurich

Date: 6-6-2011

Subject: **Screening level for Sec-Butanol (CAS# 78-92-2)**

The screening level for Sec-Butanol is 3000 ug/m³ based on 8 hour averaging.

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), 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 has maintained on file a sec-butanol Interim Screening Level of 3050 ug/m³ based upon an occupational exposure level (OEL) of 100 ppm (305 mg/m³). File documentation was scarce as to further review. Staff performed the data reviews noted above. As a summary finding, there are no EPA RfD or RfC values for sec-butanol, nor are there published toxicity data sufficient to derive a RfC. There remains the ACGIH TLV for sec-butanol of 100 ppm (305 mg/m³). The basis for the TLV is to prevent upper respiratory irritation and CNS impairment.

ITSL = OEL divided by 100
= (305 mg/m³)/100
= (3.00 mg/m³) (1000 ug/mg) – 2 significant figures

ITSL = 3000 ug/m³ 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.