

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

September 20, 2002

TO: File for 3-Methoxy-3-methyl-1-butyl Acetate (CAS# 103429-90-9)
FROM: Michael Depa, Air Unit, Environmental Science and Services Division
SUBJECT: Screening Level Determination for 3-methoxy-3-methyl-1-butyl acetate

The initial threshold screening level (ITSL) for 3-methoxy-3-methyl-1-butyl acetate is 0.1 $\mu\text{g}/\text{m}^3$ based on an annual averaging time.

The following references or databases were searched to identify data to determine the screening level: U.S. EPA Integrated Risk Information System (IRIS), Registry for Toxic Effects of Chemical Substances (RTECS), American Conference of Governmental and Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), National Institute for 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 2002), 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 dose (RfD) or a reference concentration (RfC) for 3-methoxy-3-methyl-1-butyl acetate. There are no occupational exposure limits (e.g., ACGIH TLV or NIOSH REL). The molecular formula is $\text{C}_8\text{H}_{16}\text{O}_3$. The molecular weight of 3-methoxy-3-methyl-1-butyl acetate is 160.2g. Figure 1. shows the molecular structure.

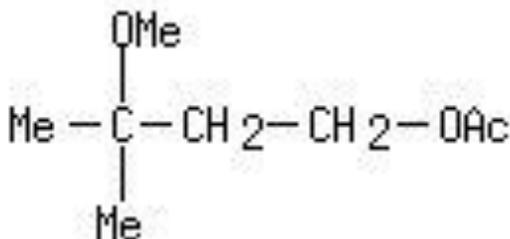


Figure 1. Molecular Structure of 3-Methoxy-3-methyl-1-butyl Acetate

Since there was no toxicological data with which to derive a screening level, the ITSL was based on Rule 232(1)i.

MD:LH