

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

September 12, 2000

TO: File for Diphenyl Phosphoric Acid (CAS #838-85-7)

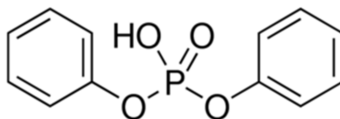
FROM: Michael Depa, Toxics Unit, Air Quality Division

SUBJECT: Screening Level Determination

The initial threshold screening level (ITSL) for diphenyl phosphoric acid is 0.1 $\mu\text{g}/\text{m}^3$ based on 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- June, 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 diphenyl phosphoric acid. The ACGIH and NIOSH have not established occupational exposure limits (OELs). The molecular formula is $\text{C}_{12}\text{H}_{10}\text{O}_4\text{P}$. The molecular weight is 250.19g. The molecular structure is shown in Figure 1. The melting point is 68-70°C. Diphenyl phosphoric acid is a solid.

Figure 1. Diphenyl Phosphoric Acid



Since there was no adequate toxicological data with which to derive a screening level, Rule 232(1)i was used to establish the screening level of 0.1 $\mu\text{g}/\text{m}^3$ with an annual averaging time.

MD:DB