

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: File for Cyclohexanone Peroxide (CAS No. 12262-58-7)

FROM: Michael Depa, Air Quality Division, Toxics Unit

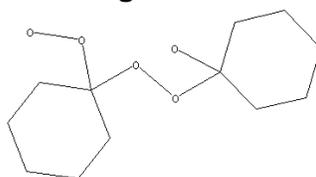
SUBJECT: Screening Level Determination

DATE: April 28, 2006

The initial threshold screening level (ITSL) for cyclohexanone peroxide 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. Environmental Protection Agency (EPA) Integrated Risk Information System, Registry for Toxic Effects of Chemical Substances, American Conference of Governmental and Industrial Hygienists Threshold Limit Values, National Institute for Occupational Safety and Health Pocket Guide to Hazardous Chemicals, Environmental Protection Bureau Library, International Agency for Research on Cancer Monographs, Chemical Abstract Service (CAS) - Online (1967 – April 2006), National Library of Medicine, Health Effects Assessment Summary Tables, and National Toxicology Program Status Report. The EPA has not established a reference concentration or reference dose for cyclohexanone peroxide. The exact structure, molecular formula and molecular weight of cyclohexanone peroxide are not known. However, a possible molecular structure of cyclohexanone peroxide is shown in Figure 1. Based on this structure, the molecular weight of cyclohexanone peroxide would be 244g.

Figure 1



After a thorough search of the literature, it was found that there were no toxicity studies available for review. Therefore, based on Rule 232(1)(i), the ITSL for cyclohexanone peroxide is 0.1 $\mu\text{g}/\text{m}^3$ (annual averaging time).

MD:LH