

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

July 9, 1987

TO: File

FROM: Catherine Simon

SUBJECT: Exxate 600 Solvent (CAS No. 88230-35-7)

The Exxate solvents are described as a series of alkyl acetates, having the general structure of RCH_2OCOCH_3 , where R is a branched alkyl group containing 6-13 carbons. These solvents are synthesized from acetic acid and an isomeric mixture of branched aliphatic alcohols. Synonyms for Exxate 600 Solvent include the following:

Acetic acid, ester with C6-rich-oxo-alcohol
Oxo-hexyl acetate

The only toxicity data available for this compound came from the Exxon Corporation. No data were found through a computerized search of the scientific literature. Data supplied by Exxon Corporation included an eye irritation study, and acute oral, dermal, and inhalation studies in various laboratory rodents.

The acute oral toxicity data were used to derive an acceptable ambient concentration (AAC) for Exxate 600 Solvent, since the inhalation data were considered inappropriate, due to the fact that 100% mortality occurred in the exposed mice. In the acute oral toxicity study, no deaths occurred in rats (five per dose group) administered a single dose of 0.0346, 0.120, 0.417, 1.45, 5.0, or 10.0 g/kg Exxate 600 Solvent. The highest dose group (10.0 g/kg) is used as a surrogate LD50 to derive an AAC for Exxate 600 as follows.

$$AAC = 10,000 \text{ mg/kg} \times (8.12 \times 10^{-6}) = 81 \text{ ug/m}^3$$

CAS:mh