

**MICHIGAN DEPARTMENT OF NATURAL RESOURCES**

**INTEROFFICE COMMUNICATION**

November 10, 1994

TO: Allyl Benzene (CAS # 300-57-2)

FROM: Gary Butterfield

SUBJECT: ITSL for allyl benzene

There is no EPA RfC or RfD for allyl benzene. There also is no occupational exposure limit developed by ACGIH, OSHA or NIOSH. An Oct 14, 1994 CAS and NLM on-line literature search was able to find a few acute toxicity studies.

Hagan et al (1965) reported the Swiss mouse LD50 as being 2900 mg/kg. The rat LD50 study reported by Jenner et al (1964) which appears to be the same study described by Taylor et al (1964) because the same authors and same data are used. The acute study reported by Hagan et al (1965) also reports that same rat LD50. Jenner et al (1964) reported the Osborne Mendel rat oral LD50 to be 5540 mg/kg.

For the purpose of calculating the ITSL, the Hagan et al LD50 in mice of 2900 mg/kg can be used. From the equation from Rule 232(1)(h) the ITSL is calculated to be 5  $\mu\text{g}/\text{m}^3$  with annual averaging.

**References**

Hagan et al. 1965. Toxic properties of compounds related to safrole. Toxicol Appl Pharmacol 7:18-24.

Jenner et al. 1964. Food flavoring and compounds of related structure. I Acute oral toxicity. Food Cosmet Toxicol 2:327-343.

Taylor et al. 1964. A comparison of the toxicity of some allyl, propenyl and propyl compounds in the rat. Toxicol Appl Pharmacol 6:378-387.