

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

September 1, 1999

TO: 5-Chloro-2-methyl-4-isothiazolin-3-one file (CAS # 26172-55-4)

FROM: Gary Butterfield

SUBJECT: Screening level for 5-chloro-2-methyl-4-isothiazolin-3-one

5-Chloro-2-methyl-4-isothiazolin-3-one is a component of the pesticide mixture commonly known as Kathon (CAS# 55965-84-9). The other component is 2-methyl-4-isothiazolin-3-one (CAS# 2682-20-4). These materials are present in Kathon as ratio of MI/CMI 1 to 3, with trace amounts of magnesium chloride and nitrate present as stabilizers. The pesticide with the common name of Kathon is of the general group of methylisothiazolinone pesticides. As an EPA registered pesticide, the EPA has in its possession a wealth of unpublished toxicity information on the methylisothiazolinone pesticides, including Kathon. A reregistration eligibility decision (RED) document summarizes many of the key studies for the mixture. However, only a few toxicity studies that have been published are available to AQD. There is very little information available on the individual components of the Kathon mixture. The few studies that are available examined skin contact sensitivity as an endpoint-not information that can be used to calculate a screening level.

A June 9, 1999 CAS NLM on-line literature search was conducted. A review of secondary toxicity references was also conducted. Few toxicity studies evaluating just 5-chloro-2-methyl-4-isothiazolin-3-one have been published. None of the available studies provided information that was useable to calculate a screening level.

Due to a lack of toxicity information on this particular chemical, the screening level is being established under R232(i) at $0.1 \mu\text{g}/\text{m}^3$ with annual averaging.

GB:ST