

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAR 17 1992

SUBSTANCES

MEMORANDUM

SUBJECT:

Kathon® 886F Microbicide: Two-Year Rat Chronic/

Carcinogenicity Study; Dose Level Selection

TO:

Jim Wilson

Product Manager (31)

Registration Division (H7505C)

FROM:

THRU:

Linda L. Taylor, Ph.D.

Toxicology Branch I4, Section II, Health Effects Division (H7509C)

K. Clark Swentzel X. Clark &

Section II Head, Toxicology Branch II

Health Effects Division (H7509C)

and

Marcia van Gemert, Ph.D. Musufement 3/12/92 Chief, Toxicology Branch Toxicology

Registrant:

Rohm & Haas Company

Chemical:

5-chloro-2-methyl-4-isothiazolin-3-one and 2-

methyl-4-isothiazolin-3-one

Synonym:

Kathon 886F Microbicide

Project No.:

2-1308

Caswell No.:

195C

Record No.:

none. Case 022081; Submission: S410641

DP Barcode:

D173779

Identifying No .:

000707-00130

MRID No.:

none

Action Requested: Please review letter.

Comment: The Registrant has submitted a letter (dated 11/8/91) informing the Agency of the basis for the dose levels used in an on-going 2-year rat chronic toxicity/carcinogenicity study.

The Registrant states that due to the dose-related intrinsic irritancy property of this biocide, the concentrations that can be tested are limited. From the information provided, increasing concentrations of the test material in the drinking water lead to decreases in intake of water; the higher the concentration in the water, the lower the water intake, which limits test material intake also. Based on this consideration, the dose selection appears reasonable, However, it is not apparent to this reviewer why the test material is being administered  $\underline{via}$  the drinking water, since gastric irritation is known to occur. Previously, TB II had suggested (TB II memo dated 10/5/90) that dosing  $\underline{via}$  the diet might alleviate the irritative effects seen in the drinking water and gavage studies. The Registrant should provide justification for administering the test material  $\underline{via}$  the drinking water and not  $\underline{via}$  the diet.

## CONCLUSION

The Registrant has submitted the criteria used to select dose levels for an ongoing (in progress for over 1 year) chronic toxicity/carcinogenicity study in rats for Agency review. Before a final determination regarding the adequacy of the dose levels can be made, justification for administering the test material <u>via</u> the drinking water should be provided.