UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC

DEC 31 1991

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: Octhilinone (Kathon) - Response to the Reregistration Phase IV Data Call-In Notice (Case No. 2475; EPA ID No. 099901-00707)

TOX Chem No.:	613C
PC Code No.:	099901
Project No.:	2-0405
Submission No.:	S380416

FROM: William B. Greear, M.P.H. for WG 12/23/91
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Health Effects Division (H7509C)

TO: Barbara Briscoe/Franklin Rubis, PM Team #51
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Special Review and Reregistration Division (H7508W)

THRU: Marion P. Copley, D.V.M., Section Head Marion Copley 12/23/91 KB 12/23/91
Review Section IV, Toxicology Branch I
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I. CONCLUSIONS:

The request for a waiver of the acute oral toxicity study on technical octhilinone is acceptable. A study on the formulation may be used to satisfy this requirement.

II. REQUESTED ACTION:

SRRD has requested that TB-I respond to the sponsor's request for waiving the data requirement for an acute oral toxicity study on technical octhilinone.

III. DISCUSSION

Under a cover letter dated September 18, 1981, Wendy W. Bingaman (Rohm and Haas) has provided the following rationale for the requested data waiver for an acute oral toxicity study on the technical grade of the active ingredient, octhilinone:

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"In Phase 2 and 3 of reregistration we had requested a waiver form performing an acute oral LD_{50} study on the technical grade of the active ingredient. We still believe the existing studies on file at the Agency (MRID Nos. 46402, and 41482502) accurately fulfill the requirement of assessing the intrinsic toxicity of octhilinone. While we are aware that the acute oral test was conducted with a 46.7% solution of octhilinone formulated in propylene glycol and not with the technical material, both the technical material and the material tested are the identical active octhilinone. Any additional testing would unnecessarily increase the use of laboratory animals and would not add any additional data of toxicological significance.

There are other considerations which further support the position that an additional test is not necessary:

Octhilinone is insoluble in water; propoylene glycol was selected as the delivery system in the test since it is the most likely solvent for the formulated material as well as the technical grade product. Propylene glycol is an acceptable carrier for acute oral toxicity tests. Intrinsically, the acute effects of octhilinone are directly associated with a dose or **concentration** dependent corrosive effect on mucous membranes. Thus, the end results are likely to be identical for either material, and would yield values not significantly different from those already reported. Since the primary acute toxicity has been adequately characterized and is directly associated with gastro-intestinal corrositivity, additional acute oral tests are viewed as unnecessary.

We thus would like to reiterate our request for a waiver."

TB-I has reconsidered the sponsor's argument for waiving the requirement for an acute oral toxicity study on the technical. Most of the arguments are the same as those submitted in Phase 2 and 3. Following a meeting of the HED FIFRA '88 committee, 12/12/91, it was concluded that the acute oral study using the 46.7% formulation product with octhilinone in propylene glycol would satisfy the requirement for an acute oral study on the technical. Since the most likely vehicle would be propylene glycol, the concentration of active ingredient in the final dosing solutions would be the same for either a study on the formulation or technical.

The acute oral study (81-1), MRID # 414825-02, Study # 86R178, using the 46.7% formulation is considered acceptable for review. It should be noted however, that the results would need to be converted to mg of technical rather than mg of formulation/kg body weight.

OCTHILIN.WG/lca