

RECORD NUMBER

109701

Shaughnessey Code

REVIEW NUMBER

ECOLOGICAL EFFECTS BRANCH REVIEW

DATE: IN 11-7-90

OUT 2-28-91

FILE OR REG. NO. Case # 2510

PETITION OR EXP NO. _____

DATE OF SUBMISSION 11-7-90

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EEB ESTIMATED COMPLETION DATE 3-1-91

RD ACTION CODE/TYPE OF REVIEW Data Evaluation Review

TYPE PRODUCT(S): I, D, H, F, N, R, S Insecticide

DATA ACCESSION NO(S). _____

PRODUCT MANAGER NO. J. Ellenberger

PRODUCT NAME(S) Permethrin

COMPANY NAME ICI

SUBMISSION PURPOSE List B chemical phase 4 submission for
reregistration

SHAUGHNESSEY CODE

CHEMICAL AND FORMULATION

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109701

Permethrin

Tech.



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

MAR 13 1991

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

SUBJECT: Results of List B Phase 4 Acute Toxicity Studies With
Permethrin.

FROM: James W. Aherman, Chief
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

TO: Jay Ellenberger
Excellerated Reregistration Branch
Special Review and Reregistration Division (H7508W)

The following studies, corresponding to submitted List B Phase 3 summaries from the permethrin Phase 4 package, were reviewed and were found to be unacceptable for the reasons indicated:

72-1 (a) Acute Toxicity of 21Z (WRL) With a flow-through system to Bluegill Sunfish. Study author: R.G.Maddock; Performing Laboratory: Imperial Chemical Industries Ltd.; Date of test: July 1977; Manufacturer: ICI Americas Inc. Agricultural Products Wilmington, Delaware 19897: MRID No: 00097445.

72-1 (a) Acute Toxicity of FMC 33297 to Bluegill Sunfish (Lepomis macrochirus). Performing Laboratory: E G and G, Bionomics Aquatic Toxicology Laboratory 790 Main Street Wareham, Massachusetts; Date of test: Dec. 1979; Manufacturer: ICI Americas Inc. Agricultural Products Wilmington, Delaware 19897: MRID No: 00043263

72-1 (c) Acute Toxicity of 21Z (WRL) to Bluegill Sunfish. Study author: R.G.Maddock; Performing Laboratory: Imperial Chemical Industries Ltd.; Date of test: July 1977; Manufacturer: ICI Americas Inc. Agricultural Products Wilmington, Delaware 19897: MRID No: 00043265

- 1) In the flow-through test, concentrations were not measured to verify the accuracy of the metering system.
- 2) In the static tests the solutions were reported to be cloudy in most of the test concentrations for much of the test period and no explanation for this was provided.
- 3) Nominal test concentrations were not confirmed and the test material was not adequately identified.

The following studies were not reviewed because the test materials used were metabolites of permethrin while only studies using technical permethrin are required at this time:

72-1 (c) Determination of the acute toxicity of 3-Phenoxybenzoic Acid to rainbow trout (Salmo gairdneri). Conducted by: ICI Brixham Laboratory; Report No: BL/B/2038; Completion date: March 1981; MRID No: 00089037.

72-2 (a) Permethrin Acid and 3-Phenoxybenzyl Alcohol: Toxicity to first instar Daphnia magna. Conducted by: ICI Agrochemicals; Report No.: RJ 0042B; Completion date: Oct. 27, 1978; Authors: C Getty, W Wilkinson; MRID No.: 00065817.

72-2 (a) 3-Phenoxybenzoic acid: Toxicity to first instar Daphnia magna (II). Conducted by: ICI Agrochemicals; Report No.: RJ 0318B; Completion date: June 17, 1983; Authors: C. J. Everett, M. J. Hamer, and I. R. Hill; MRID No.: 00152739.

72-2 (a) 3-Phenoxybenzoic acid: Toxicity to first instar Daphnia magna (II). Conducted by: ICI Agrochemicals; Report No.: RJ 0148B; Completion date: Oct. 7 1980; Authors: P. J. Edwards, S. N. Brown, and H. Swaine; MRID No.: 00089046.

The following studies were not reviewed because they did not contain the essential information indicated:

72-1 (c) Determination of the acute toxicity of Compound 21Z (WRL) to rainbow trout (Salmo gairdneri). Conducted by: ICI Brixham Laboratory; Report No.: NEFG 78-12; Completion date: July 1977; MRID No.: 00097447.

72-1 (c) Determination of the acute toxicity of Compound 21Z (WRL) to rainbow trout (Salmo gairdneri) using dimethylsulphoxide as a solvent. Conducted by: ICI Brixham Laboratory; Report No.: NEFG 78-11; Completion date: Feb. 1978; MRID No.: 00097446.

72-1 (c) Determination of the acute toxicity of Compound 21Z (WRL) to bluegill sunfish (Lepomis macrochirus) using dimethylsulphoxide as a solvent. Conducted by: ICI Brixham Laboratory; Report No.: NEFG 78-13; Completion date: Feb. 1978; MRID No.: 00097444.

141-1 Permethrin: Oral and Contact Toxicity to Honey Bees. Conducted by: ICI Agrochemicals; Report No: TMJ1272A; MRID No: 00080602.

- 1) The test material was not properly identified.
- 2) Information on the test conditions was not provided including pH, temperature, quantity and quality of test organisms, and control mortality.
- 3) Statistical analysis was not provided.