



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

CASWELL FILE

MAR 15 1989

007082

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Avermectin - Agrimek 0.15 EC - Avid 0.15 EC - EPA
Registration No. 618-96 and EPA File Symbol 618-OI -
Submission of New Ocular Irritation Study in Rabbits

Caswell No.: 63AB
Project No.: 9-0471
Record Nos.: 235,677 and
235,686
Accession No.: 409125-01

FROM: William Dykstra, Reviewer *William Dykstra 2/24/89*
Review Section I
Toxicology Branch I - Insecticide, Rodenticide Support
Health Effects Division (TS-769C)

TO: George T. LaRocca, PM 15
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THRU: Edwin Budd, Section Head
Review Section I
Toxicology Branch I - Insecticide, Rodenticide Support
Health Effects Division (TS-769C)

Budd 2/25/89

Requested Action

Review new primary eye irritation study with Avid 0.15 EC
[REDACTED]

Conclusion and Recommendation

The eye irritation study is acceptable as Core-Minimum
data.

COMMERCIAL/FINANCIAL INFORMATION IS NOT INCLUDED

The label signal word for the Avid 0.15 EC and Agrimek 0.15 EC should be Warning based on this eye irritation study. The current label signal word is Caution and should be changed to Warning.

The precautionary statement paragraph (page 2 of label) should be modified as follows:

1. At the beginning of paragraph, add "Causes substantial but temporary eye injury. Do not get in eyes or on clothing."
2. Delete from the paragraph "May cause eye irritation."
3. Change "Avoid contact with eyes, skin, or clothing" to "Avoid contact with skin."

See changes on attached label.

Attachment

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Reviewed By: William Dykstra *William Dykstra 2/24/89*
Section I, Toxicology Branch I - IRS (TS-769C)
Secondary Reviewer: Edwin Budd
Section I, Toxicology Branch I - IRS (TS-769C) *Edw Budd 2/25/89*

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DATA EVALUATION REPORT

Study Type: 81-4 - Primary Eye Irritation TOX Chem No.: 63AB

Accession No.: N/A

MRID No.: 409125-01

Test Material: Avid 0.15 EC (L-676,863-113M054)

Synonyms: Avermectin

Study No.: TT#88-085-0

Sponsor: Merck and Company, Inc.

Testing Facility: Merck Sharp and Dohme Laboratories

Title of Report: Acute Ocular Irritation Study in Rabbits

Author(s): L.R. Gordon

Report Issued: November 15, 1988

Conclusions:

Avid 0.15 EC [REDACTED] was moderately irritating to the rabbits' eyes (scores of 19-43/110 in unwashed eyes and 17-41/110 in washed eyes). The corneal opacity, iritis, and conjunctivitis cleared in 9/10 rabbits' eyes by day 14. One rabbit's washed eye did not clear by day 14.

Classification: Core-Minimum; Toxicity Category II: Warning

Special Review Criteria (40 CFR 154.7): N/A

Review:

- L-676,863-113MO54 (Avid Commercial Lot No. 289980L); Acute Ocular Irritation Study in Rabbits (Merck Project TT#88-085-0; November 15, 1988).

Test Material - L-676,863-113MO54 (Avid Commercial Lot No. 289980L); 2.0 to 2.2 percent (w/w) abamectin.

Randomized groups of five male and five female New Zealand White rabbits, 3.17 to 3.55 kg, received 1/10 mL of test material into the conjunctival sac of the left eye. In one group of six rabbits (3 males and 3 females), the eyelids were held together for 20 seconds and then released. In the other group of four rabbits (2 males and 2 females), the test material was flushed from the eyes with 50 mL of warm tap water 20 seconds after treatment. The untreated right eye of each rabbit served as a control.

Ocular reactions, based on the Draize method, were recorded at 15 minutes, 2 and 24 hours, and then once daily for 14 days except on weekends.

Results:Unwashed Eyes

There was moderate to severe corneal opacity, iritis, and conjunctivitis in each of the six rabbits with maximum scores of 19 to 43 (total) out of 110 at 15 minutes to 2 hours. The ocular irritation (redness, swelling, discharge, chemosis, corneal opacity) gradually decreased and disappeared by day 8 in three rabbits, by day 9 in two rabbits, and by day 14 in one male rabbit.

Washed Eyes

Moderate to severe corneal opacity, iritis, and conjunctivitis in each rabbit with maximum scores of 17 to 41 (total) out of 110 present at 15 minutes to 2 hours. The corneal opacity and ocular irritation gradually decreased in four rabbits and disappeared in one rabbit by day 4, one rabbit by day 7, and one rabbit by day 9. However, female rabbit #88-0169 had moderate to severe corneal opacity and conjunctivitis (redness, chemosis, and discharge) throughout the 14-day observation period.

Conclusion:

The test material (Avid 0.15 EC) was moderately irritating to the rabbits' eyes (either unwashed or washed) but cleared in 9/10 eyes by day 14. The ocular irritation in

female rabbit #88-0169 (washed eye) did not totally reverse by day 14, although some of the other rabbit eyes which were washed were less irritated and less damaged than the unwashed eyes.

Toxicity Category II: Warning

Classification:

Core-Minimum. Not tested to day 21.

Avermectin toxicology review

Page _____ is not included in this copy.

Pages 6 through 9 are not included in this copy.

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 - ☐ Description of product quality control procedures
 - ☐ Identity of the source of product ingredients
 - ☐ Sales or other commercial/financial information
 - ☒ A draft product label
 - ☐ The product confidential statement of formula
 - ☐ Information about a pending registration action
 - ☐ FIFRA registration data
 - ☐ The document is a duplicate of page(s) _____
 - ☐ The document is not responsive to the request
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