UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

104

001248
24-D/TOX (53)

DATE: June 15, 1981

SUBJECT: Weed-B-Gon Intermediate
EPA File Symbol: 239-EUIL

Released 6-18-81

559
315

FROM: Sherell A. Sterling
FHB/TSs

TO: Richard Mountfort
Product Manager (23)

Applicant: Chevron Chemical Company
Ortho Agricultural Chemicals Division
940 Hensley Street
Richmond, CA 94804

Active Ingredients:

Dimethylamine salt of MCPP	34.0%
Dimethylamine salt of 2,4-D	31.8%
Inert Ingredients	34.2%

Background: Acute Oral, Acute Dermal, Eye and Skin Irritation studies were submitted in support of the conditional registration for this product. These studies were conducted at the Environmental Health Toxicology Labs of Standard Oil of California. The "cite-all" method of support was chosen.

Recommendations:

1. The Acute Oral study is considered adequate and acceptable for conditional registration purposes. For future submissions, please note that results of all necropsies must be included in the report.

2. The Acute Dermal study is considered adequate and acceptable for conditional registration purposes. Response data (including erythema and edema) must be reported in tabular form.

3. An Acute Inhalation study was not submitted with this application. This study is necessary since the substance is a liquid. The applicant has agreed to submit this study when completed (late 1981).

4. The Eye Irritation study is considered adequate and acceptable for conditional registration purposes.

5. The Skin Irritation study is considered adequate and acceptable for conditional registration purposes.

Labeling Recommendations:

1. Based on the Eye Irritation study, the appropriate signal word is DANGER.

2. The "Hazards to Humans and Domestic Animals" statement must be revised as follows (or similarly):

   DANGER, Corrosive. Causes irreversible eye damage and skin irritation. Harmful if swallowed or inhaled. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield, and rubber gloves when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid breathing vapors.

3. The "Statement of Practical Treatment" must be revised as follows:

   If in eyes: Flush with plenty of water. Get medical attention.

   If on skin: Wash with plenty of soap and water. Get medical attention.

   If swallowed: Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Get medical attention.

   NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Emergency information - call (415) 233-3737.

4. The "Environmental Hazards" must be revised as follows:

   "This product is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes."

5. The "Storage and Disposal" statement must be revised according to the enclosed information sheets.

Review:

1. The Acute Oral Toxicity of Weed-B-Gon Intermediate; Report #SOCAL 1779; May 1, 1981; Acc. No. 245070.

   Procedure: Groups of Sprague-Dawley rats, each with either 5M (232-305g) or 5F(202-246g), were given single doses of "Weed-B-Gon Intermediate" intragastrically. Males received dosages of 1.0-5.0 g/kg; females were dosed at 0.39-2.0 g/kg. Animals were observed for 14 days. All animals were subjected to necropsies.

   Results: The LD_{50} for males was 1.7 with a 95% confidence range of 1.2-2.5 g/kg. The female LD_{50} was 0.89 g/kg with a 95% confidence range of 0.64-1.2 g/kg. Symptoms included: weakness, ataxia, collapse,

moribund, salivation, decreased motor activity, reduced food intake; diarrhea, hematuria. Necropsy revealed: reddened GI tract, red nasal discharge, dark brown glands and hollow kidneys (per summary, latter 2 not related to study).

Study Classification: Core Minimum Data. Generally, equal numbers of males and females must be tested at each dosage level. Only summary of necropsy included; individual reports should be included.

Toxicity Category: III-CAUTION

2. The Acute Dermal Toxicity of Weed-B-Gon Intermediate; Report #SOCAL 1778; April 15, 1981; Acc. No. 245070.

Procedure: A group of 5M (2.47-2.76 kg), 5F (2.01-2.85 kg) New Zealand white rabbits were treated with 5 g/kg of "Weed-B-Gon Intermediate" at abraded skin sites. Subsequently, groups of F received single doses from 1.0-3.3 g/kg. Exposure was for 24 hours under occlusive wrap. Animals were observed for 14 days post-dosing. All animals were subjected to necropsies.

Results: No mortalities in M at 5.0 g/kg. LD_{50} for F was 3.1 g/kg with a 95% confidence range of 1.1-8.5 g/kg. Symptoms (reported for F only) included: weak, loose stools, collapse, decreased motor activity, reduced food consumption, ataxic. Most treated animals had moderate to severe erythema and edema at 24 hours. Necropsy revealed: dry, thickened, or necrotic skin in many treated animals; small white cysts in livers of 1 treated and 1 control animal.

Study Classification: Core Minimum Data. Observations were reported in summary; individual reports must be included.

Toxicity Category: III-CAUTION

3. The Eye Irritation Potential of Weed-B-Gon Intermediate; Report #SOCAL 1777; April 20, 1981; Acc. No. 245070.

Procedure: 9 New Zealand white rabbits each received 0.1 ml of "Weed-B-Gon Intermediate" in one eye. Three eyes were subsequently rinsed for one minute with 250 ml of distilled water, 30 seconds post-treatment. Draize scoring at 1, 2, 3, 7, 10, 14 and 21 days.

Results: The unwashed eyes at 24 hours exhibited corneal opacity in 3/6 = 60, 3/6 = 80; iris irritation in 4/6 = 5; redness in 1/6 = 2, 5/6 = 3; chemosis in 1/6 = 2, 2/6 = 3, 3/6 = 4; discharge in 6/6 = 3; corneal sloughing noted in 2/6. By day 21, corneal opacity noted in 1/6 = 5, 1/6

= 30, 1/6 = 40, 3/6 = 80, iris irritation in 1/6 = 5 with 3/6 unable to score due to opacity; redness in 2/6 = 1, 2/6 = 2; chemosis in 1/6 = 1, 3/6 = 2; discharge in 1/6 = 1 and 3/6 = 2.

The washed eyes at 24 hours exhibited corneal opacity in 2/3 = 60, 1/3 = 80 and 2/3 with corneal sloughing; iris irritation in 2/3 = 5; redness in 1/3 = 2, 2/3 = 3; chemosis in 2/3 = 3, 1/3 = 4; discharge in 3/3 = 2. At day 21, corneal opacity in 2/3 = 80; iris irritation couldn't be scored in 2/3; redness in 2/3 = 1; chemosis in 2/3 = 1; discharge in 1/3 = 1, 1/3 = 2.

Necropsy of 3 animals (2 unrinsed, 1 rinsed) showed disruption and erosion of corneal epithelium; corneal stroma edematous; neovascularization with inflamed infiltrate; anterior synechia.

Study Classification: Core Guideline Data.

Toxicity Category: I-DANGER

4. The Skin Irritation Potential of Weed-B-Gon Intermediate; Report # SOCAL 1776; February 20, 1981; Acc. No. 245070.

Procedure: 6 New Zealand white rabbits with 2 intact and 2 abraded sites per animal received 0.5 ml of "Weed-B-Gon Intermediate" at each site. Draize scoring at 24, 48, 72 hours; 7 days.

Results: At 24 hours, intact sites exhibited erythema at 7/12 = 3, 5/12 = 4; edema at 3/12 = 3, 9/12 = 4. Abraded sites at 24 hours showed erythema in 5/12 = 3, 7/12 = 4; edema at 2/12 = 3, 10/12 = 4. At 72 hours, intact sites showed erythema in 1/12 = 1, 3/12 = 2, 8/12 = 3; edema at 4/12 = 1, 8/12 = 2. The Primary Irritation Index was 5.8.

Study Classification: Core Guideline Data.

Toxicity Category: II-WARNING

7/12 = 2, 1/12 = 3. Abraded sites by 72 hours exhibited erythema in 1/12 = 1, 3/12 = 2, 8/12 = 3; edema at 4/12 = 1,

PRECAUTIONARY STATEMENTS
\ZARDS TO HUMANS & DOMESTIC ANIMALS

\NGER

rosive to eyes Causes eye damage Do not get in eyes Wear goggles or face shield when dling concentrate Harmful if swallowed Avoid contact with skin or clothing Avoid athing vapors. In case of eye contact, immediately flush eyes with fresh er for 15 minutes and get medical attention If swallowed, promptly drink a large quantity water and induce vomiting Get medical attention immediately In case of skin contact, h skin with plenty of soap and water Get medical attention if irritation persists e to Physicians' Emergency Information - call (415) 233 3737

NVIRONMENTAL HAZARDS

s product is toxic to fish Keep out of lakes, streams, or ponds Do not contaminate water by aning of equipment or disposal of wastes

RECTIONS FOR USE

s a violation of Federal law to use this product in a manner incon tent with its labeling

AD ENTIRE LABEL USE STRICTLY IN ACCORDANCE WITH ECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH PPLICABLE STATE AND FEDERAL REGULATIONS.

STORAGE AND DISPOSAL

OHIBITIONS

not contaminate water, food, or feed by storage, disposal cleaning of equipment.
)en dumping is prohibited.

ORAGE

NOT use in equipment or store in containers in which other ricultural chemicals will be handled.
NOT handle or store near plants, seeds, fertilizer, insecticides or ngicides.

ESTICIDE DISPOSAL

sticide, spray mixture, or rinsate that cannot be used or emically reprocessed should be disposed of in a landfill ap- oved for pesticides or buried in a safe place away from ater supplies.

ONTAINER DISPOSAL

seal container and offer for reconditioning, or triple rinse r equivalent) and offer for recycling, reconditioning, or dis-)sal in approved landfill, or bury in a safe place

ENERAL

)nsult federal, state or local disposal authorities for ap- oved alternative procedures.

Chevron

ORTHO

WEED-B-GON®

Intermediate

FOR MANUFACTURING USE ONLY

NOT FOR DISTRIBUTION FOR SALE OR USE IN THIS FORM. FOR ORTHO MANUFACTURING USE ONLY.

Refer to specific Ortho formulas for detailed information. Products formulated with WEED-B-GON Intermediate may require registration with the Environmental Protection Agency.

Active Ingredients:	By Wt.
*Dimethylamine salt of 2-(2-Methyl-4-chlorophenoxy)propionic acid	34.0%
**Dimethylamine salt of 2,4-Dichlorophenoxy acetic acid	31.8%
Inert Ingredients	34.2%

*Equivalent to 28.1% 2-(2-methyl-4-chlorophenoxy)propionic acid and 26.4% **2,4-dichlorophenoxy acetic acid or 2.79 lbs./gal. of 2-(2-methyl-4-chlorophenoxy)propionic acid and 2.62 lbs./gal. of **2,4-dichlorophenoxy acetic acid per U.S. gallon at 68°F.
**Isomer specific by A.O.A.C. Method No. 6.D01-5.

KEEP OUT OF REACH OF CHILDREN

DANGER

See Side Panels for Additional Precautionary Statements

NET CONTENTS

Manufactured for
Chevron Chemical Company
Ortho Agricultural Chemicals Division
San Francisco CA 94119 Richmond CA 94804
Product 4851 Made in U.S.A.
Form 9829-A EPA Est. 39335-AL-1
EPA File Symbol 239-NEW