3-10-82 EPA-1145 FXR-2807

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE:

SUBJECT: EPA File Symbol 476-EERE
LC-6641 Selective Herbicide

002807

FROM: Deloris F. Graham 3/10/82
FHB/TSS

TO: Robert J. Taylor
Product Manager (25)

Applicant: Stauffer Chemical Company
1200 South 47th Street
Richmond, California 94804

Active Ingredient:

Sutan: S-ethyl diisobutylthiocarbamate	53%
Atrazine: 2-chloro-4-(alkylamino)-6-(isopropylamino)-s-triazine	12.98%
Related Triazines	0.27%
Inert Ingredients	33.75%

Background: Submitted Acute Oral, Acute Dermal, Eye Irritation and Skin Irritation Studies. Studies conducted by Stauffer Chemical Company. Data under Accession Number 246784. Combined cite-all and alternate method of support.

Recommendations:

(1) FHB/TSS finds these data acceptable to support conditional registration of this product. However, for future submission please note:

a. In the Eye Irritation Study, individual scoring for corneal opacity, iris irritation and conjunctive irritation per animal must be submitted.

b. In the Primary Dermal Irritation Study, 4 sites (2 abraded and 2 intact) per animal must be used.

(2) The appropriate signal word is DANGER.

Label:

(1) The appropriate signal word is DANGER and must appear on center front panel of label.

(2) The following statement must precede the "Harmful if swallowed" statement:

"Corrosive, cause irreversible eye damage".

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EPA FORM 1320-6 (REV 3-76)

(3) The statement "Keep out of lakes, streams, and ponds" must be revised to read "Do not apply directly to water."

Review:

(1) Acute Oral Toxicity Study: Stauffer Chemical Compay; Report #T-10880; February 4, 1982.

Procedure: 7 groups, 5 of which consisted of 10M and 10F, and 2 of which consisted of 20M and 10F, each received one of the following doses: 2000, 2200, 2500, 2800, 3200, 4000 and 5000 mg/kg. Observations made daily for 14 to 15 days after treatment. Necropsy performed on all animals.

Results: at 2200 mg/kg, 1/10M died; at 2500 mg/kg, 12/20M and 2/10F died; at 2800 mg/kg, 8/20M died; at 3200 mg/kg, 6/10M and 2/10F died; at 4000 mg/kg, 9/10M and 4/10F died; at 5000 mg/kg, 10/10M and 9/10F died.

Toxic signs included moderate depression, ptosis, chromodacryarrhea, severe depression, red facial stains, yellow discoloration around the anogenital region, salivation, reddened lungs, white solid mass in the urinary bladder and dehydration.

Necropsy revealed white fluid in the stomach or gastrointestinal tract; brown or red-brown foci on the cardia portion of the stomach; stomach wall appeared thin; gray-tan discoloration of the liver; similar discoloration of the spleen, left kidney and left adrenal; reddened lungs and gastrointestinal tract; reddened jejunum and scotal skin; red to yellow discoloration around the muzzle.

LD_{50} for males was 2780 mg/kg with 95% confidence limits between 2490 and 3104 mg/kg. LD_{50} for females wa 3600 mg/kg with 95% confidence limits between 3167 and 4093 mg/kg.

Study Classification: Core Guideline Data

Toxicity Category: III-CAUTION

(2) Acute Dermal Toxicity Study: Stauffer Chemical Company; Report #T-10675; January 29, 1982.

Procedure: 4M and 4F rabbits received 2000 mg/kg of the test material under occlusive wrap for 24 hour exposure. Half the animals had abraded skin. Observations made for 14 days after treatment. Necropsy performed on all animals.

Results: No mortalities or toxic signs. No abnormalities at necropsy. Mild to moderate erythema and edema noted. LD_{50} greater than 2000 mg/kg.

Study Classification: Core Guideline Data

Toxicity Category: III - CAUTION

(3) Eye Irritation Study: Stauffer Chemical Company; Report #T-10675; January 29, 1982.

Procedure: 9 rabbits received 100 mg of the test material in one eye each. The eyes of three of the rabbits were washed 20-30 seconds posttreatment. Observations made at 24, 48, 72 hours and at 4 and 7 days. If irritation was present at 7 days an additional observation made every 3-4 days until injury subsided or was found to be irreversible.

Results: 6/6 of the unwashed group showed severe corneal opacity and moderate to severe redness, chemosis, discharge. 4/6 moderate to severe iris irritation. At day 7, minimal remission of these symptoms. At 14 days, 1/6 moderate irritation. Pannus and corneal ulcer observed through day 28; clear by day 31.

2/3 of the washed groups showed mild opacity and 1/3 of the washed group moderate to severe opacity. 1/3 showed moderate irritation of the iris. 3/3 showed moderate to severe redness and chemosis and mild to moderate discharge. Complete reversal of these symptoms occurred by seven days.

Study Classification: Core Minimum Data. Individual scoring for corneal opacity, iris irritation and conjunctive irritation per animal must be submitted.

Toxicity Category: I - DANGER

(4) Primary Dermal Irritation Study: Stauffer Chemical Company; Report #T-10675; January 29, 1982

Procedure: 6 rabbits received 0.5g of the test material at one intact and one abraded skin site per animal under occlusive wrap for 24 hour exposure. Observations were made at 24 and 72 hours.

Results: At 24 hours, 6/6 animals had mild to moderate erythema (4/6=1, 2/6=2) and 4/6 edema (3/6=1, 1/6=2). At 72 hours, 2/6 showed mild to moderate erythema (1/6=1, 1/6=2) and 1/6 mild edema (1/6=1). Primary irritation score was 1.3.

Study Classification: Core Minimum Data. 4 sites, 2 abraded and 2 intact, per animal must be used.

Toxicity Category: III - CAUTION

Butylate toxicology review

Page _____ is not included in this copy.

Pages 4 through 16 are not included in this copy.

The material not included contains the following type of information:

___ Identity of product inert ingredients

___ Identity of product impurities

___ Description of the product manufacturing process

___ Description of product quality control procedures

___ Identity of the source of product ingredients

___ Sales or other commercial/financial information

X A draft product label

___ The product confidential statement of formula

___ Information about a pending registration action

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