



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

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MAY 26 1987

MEMORANDUM

SUBJECT: EPA Registration No. 352-448
DuPont Preview Herbicide

FROM: Deloris F. Graham *OJA 6/4/87*
Technical Support Section
Fungicide-Herbicide Branch
Registration Division (TS-767C) *E 6/4/87*

TO: Robert J. Taylor, PM 25
Fungicide-Herbicide Branch
Registration Division (TS-767C)

APPLICANT: E.I. du Pont de Nemours & Co., Inc.
Agricultural Products Department
Walker's Mill Building
Barley Mill Plaza
Wilmington, DE 19898

ACTIVE INGREDIENTS:

Metribuzin [4-Amino-6-(1,1-dimethylethyl)- 3-(methylthio)-1,2,4-triazin-5(4H)-one]	68.5%
Ethyl-2-[[[(4-chloro-6-methoxypyrimidin- 2-yl)amino]carbonyl]amino]sulfonyl] benzoate	6.5%
INERT INGREDIENTS:	25.0%

BACKGROUND:

Submitted Acute Oral, Acute Dermal, Eye Irritation, Skin Irritation, and Skin Sensitization Studies were submitted to support conditional registration of this product. Studies conducted by Haskell Laboratory. Data under EPA MRID Nos. 400988-02, -03, -04, -05, and -06. Method of support not indicated.

RECOMMENDATION:

1. FHB/TSS finds these data acceptable to support conditional registration of this product.
2. Since the products cited are substantially similar to product under review the inhalation waiver referenced for these cited products can be used to support this product.
3. The appropriate signal word is CAUTION.

LABEL:

The storage and disposal statements must appear under the following heading "Directions For Use" subheading "Storage and Disposal."

REVIEW:

- (1) Acute Oral Toxicity Study: Haskell Laboratory; Report No. 345-86; June 16, 1986; EPA MRID No. 400988-02.

PROCEDURE:

Four groups consisting of ten male and ten female rats each were dosed with one of the following doses: 1500, 2000, 2500, and 3000 mg/kg. Observations made for 14 days postdosing. Necropsy was performed on three surviving and three dying during study animals at each dose level were possible.

RESULTS:

At 1500 mg/kg, 1/10 M died; at 2000 mg/kg, 8/10 M and 4/10 F rats died; at 2500 mg/kg, 6/10 M and 7/10 F died; at 3000 mg/kg, 9/10 M and 8/10 F died. Toxic signs reported included lethargy, hunched posture, diarrhea, wet and stained perineum and slight to severe weight losses. Necropsy report revealed eyes - discoloration, cloudy, bilateral, lungs - discoloration, bright red, diffuse; oral cavity - discharge, brown, moderate; perineum - stain, brown, severe, wet; thymus - discoloration, dark red, diffuse; whole body - autolysis, mild; periocular - chromodocryorrhea, bilateral, moderate; periaural - stain, red, moderate, urinary bladder - fluid, red tinged; renal pelvis - dilatation, bilateral, right moderate, left slight; seminal vesicles - small, bilateral; stomach - fluid, clear, oily; small intestine - fluid clear, oily, duodenum, jejunum; stomach - distended with gas; thymus - foci, red, several, scattered; nose - discharge, brown, slight; uterine horns - fluid, clear,

bilateral. LD₅₀ for males reported to be 2000 mg/kg (with 95% confidence limits between 1500 and 2300 mg/kg). LD₅₀ for females reported to be 2300 (2000-2600) mg/kg. LD₅₀ for males and females combined reported to be 1400 (1100-1700) mg/kg.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: III - CAUTION.

(2) Acute Dermal Toxicity Study: Haskell Laboratory;
Report No. 390-86; July 2, 1986; EPA MRID No. 400988-03.

PROCEDURE:

Five male and five female rabbits with intact skin sites each were treated with a single 2000 mg/kg dose of the test material dermally. Treated sites were placed under occlusive wrap for 24-hour exposure period. Observations made for 14 days posttreatment.

RESULTS:

No mortalities reported. Mild erythema, diarrhea, weight loss, and severe redness and chemosis in one rabbit. LD₅₀ reported to be greater than 2000 mg/kg.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: III - CAUTION.

(3) Eye Irritation Study: Haskell Laboratory; Report No.
277-86; June 19, 1986; EPA MRID No. 400988-04.

PROCEDURE:

Nine rabbits received 0.1 ml of the test material in one eye each. The treated eyes of three of the rabbits were washed with lukewarm tap water for 1 minute 20 seconds after treatment. Observations made for 72 hours posttreatment.

RESULTS:

At 24 hours posttreatment, 1/6 rabbits of the unwashed group had corneal opacity (1/6 = 10); 6/6 of the unwashed group and 3/3 of the washed group had conjunctive redness (6/6 = 1) (3/3 = 1) and chemosis (6/6 = 1) (3/3 = 1); biomic of cornea and hemastix positive for blood in one animal also reported. Corneal opacity and all other irritation had cleared at 72 hours.

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STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: III - CAUTION.

- (4) Skin Irritation Study: Haskell Laboratory; Report No. 316-86; June 19, 1986; EPA MRID No. 400988-05.

PROCEDURE:

Six rabbits with two abraded and two intact skin sites each received 0.5 g of the test material under occlusive wrap for 24 hour exposure. Observations made for 5 days posttreatment.

RESULTS:

At 24 hours posttreatment, slight to severe erythema (scores of 1, 2, 3, and 4) and slight to well-defined edema (scores of 1 and 2). At 72 hours, slight to moderate erythema (scores of 1, 2, and 3) and slight to well-defined edema (scores of 1 and 2). Primary Irritation Index reported to range between 1.0 and 3.4. Irritation had cleared at day 5.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: III - CAUTION.

- (5) Skin Sensitization Study: Haskell Laboratory; Report No. 575-86; September 10, 1985; EPA MRID No. 400988-06.

PROCEDURE:

Ten guinea pigs received 1 drop of 40% and 40% w/v suspensions of the test material in water by lightly rubbing in skin sites during primary irritation phase. Two days after primary irritation application these same 10 guinea pigs received four sacral intradermal injections (1 per week) of 0.1 ml of a 1.0% suspension of the test material in saline during induction phase. Observations made at 24 hours after each application. Two weeks after final induction phase application a challenge dose was applied by lightly rubbing in 1 drop of 40% and 4% suspension of test material in distilled water on separate sites. Observations made at 24 and 48 hours after each challenge dose application. At challenge another group of guinea pigs (naive control) were also treated.

RESULTS:

No irritation reported in guinea pigs during primary irritation phase. Ten out of ten animals had severe erythema and edema after first three induction phase applications; after

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fourth induction phase application 4/10 had severe erythema and edema; 6/10 had mild erythema. No irritation produced at 24 or 48 hours after challenge. It is concluded that this product is not a skin sensitizer.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: Nonsensitizing.

METRIBUZIN

RIN : 3187-91

Page is not included in this copy.

Pages 6 through 7 are not included.

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 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.

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.