MEMORANDUM

SUBJECT: EPA File Symbol 241-EOT
Squadron Herbicide

FROM: Deloris F. Graham
Technical Support Section
Fungicide-Herbicide Branch
Registration Division (TS-767C)

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

APPLICANT: American Cyanamid Company
Agricultural Division
P.O. Box 400
Princeton, NJ 08540

ACTIVE INGREDIENT:
Ammonium salt of imazaquin . . . . . . . . . . 3.84%
Pendimethalin . . . . . . . . . . . . . . . . . . . . . . 21.85%
INERT INGREDIENTS: . . . . . . . . . . . . . . . . . . . . . . 74.31%

BACKGROUND:

Submitted Acute Inhalation and Dermal Sensitization
Studies to support conditional registration of this product.
Studies conducted by Biosearch Incorporated and Dawson Research
Corporation. Data under Accession No. 265326. Method of
support not indicated.

RECOMMENDATION:

FHB/TSS finds these studies acceptable to support
conditional registration of this product.
LABEL:

1. In regard to Acute Inhalation hazard the precautionary statements must include "Harmful if inhaled. If inhaled remove victim to fresh air. Get medical attention."

2. In regard to Dermal Sensitization no labeling required.

REVIEW:

(1) Acute Inhalation Toxicity Study: Biosearch Incorporated; Project No. 86-5081A; September 3, 1986.

PROCEDURE:

Ten male and ten female rats were exposed for 4 hours to a gravimetric concentration of 2.74 mg/L (nominal = 16.12 mg/L). Temperature ranged between 17.5 and 24.0 °C with relative humidity between 56 and 68%. Mass median aerodynamic diameter reported to be 2.19 ± 1.85 micrometers. Observations made for 14 days postexposure. Necropsy performed on all animals.

RESULTS:

No mortalities reported. Toxic signs reported included nasal discharge, wet muzzles, nasal staining, yellow stained coats, and decrease in weight in one animal. Necropsy report revealed yellow tail and slightly congested lungs. LC50 reported to be greater than 8.23 mg/L based on Scepter and 2.67 mg/L based on Prowl. However, the gravimetric concentration for the formulated product was reported to be 2.74 mg/L. Since there were no deaths reported it is concluded that the LC50 is greater than 2.74 mg/L.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: III - CAUTION.

(2) Dermal Sensitization Study: Dawson Research Corporation; DRC 4900; June 15, 1986.

PROCEDURE:

Two groups consisting of ten male guinea pigs each received 0.4 ml application of one of the following substances: test material or 0.1% dinitrochlorobenzene (DNCB) in 50% ethanol (positive control), three times a week for 3 weeks during induction phase. Two weeks after final induction
phase application a challenge dose was applied to test material group, DNCB group, and a naive control group. Observations made at 24 and 48 hours after each application.

RESULTS:

One animal reported to have died on day 28 due to cystitis and not treatment related. Slight to moderate erythema noted in test group beginning day 9 through day 21 and sloughing with dryness of skin also noted during induction phase. No irritation reported in test group at 24 and 48 hours post-challenge.

Slight erythema reported in DNCB (positive control) group beginning day 11 through day 21 with sloughing, dryness of skin, and scabbing noted during induction phase. Very slight erythema reported in positive control group at 24 and 48 hours after challenge dose confirming positive sensitization response. No irritation produced in naive control at challenge dose.

Since no irritation was produced in test group or naive control group at challenge it is concluded that this product did not produce a sensitizing response.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: Nonsensitizing.
Pendimethalin/Imazapquin toxicology review

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
- A draft product label
- The product confidential statement of formula
- Information about a pending registration action
- FIPRA 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.