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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

FEB 19 1987

MEMORANDUM

SUBJECT: EPA File Symbol 241-EOO
Arsenal Herbicide Applicator's Concentrate

FROM: Deloris F. Graham DFG 2/24/87
Technical Support Section
Fungicide-Herbicide Branch
Registration Division (TS-767C)

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

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

ACTIVE INGREDIENTS:
Isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H imidazol-2-yl]-3-pyridine carboxylic acid) 53.1%
INERT INGREDIENTS: 46.9%

BACKGROUND:

Submitted Dermal Sensitization and Acute Inhalation Toxicity Studies. Studies conducted by Biosearch Incorporated. Data under MRID Numbers: 400037-07; 400037-08. Method of support not indicated.

RECOMMENDATIONS:

1. FHB/TSS finds these data acceptable to support conditional registration of this product.

2. According to a note from the Product Manager the acute oral, dermal, skin irritation, and eye irritation studies were reviewed under EPA Experimental Use Permit No. 241-EUP-114.

LABEL:

1. Labeling submitted in regard to acute inhalation hazard is acceptable.

2. No additional labeling necessary in regard to dermal sensitization.

REVIEW:

(1) Dermal Sensitization Study: Biosearch Incorporated; Lab Report No. 86-4929A; April 28, 1986; MRID No. 400037-07.

PROCEDURE:

A group of twelve male guinea pigs received 0.4 ml of a 100% test material three times a week for 3 weeks totaling nine induction phase applications. Two weeks after the ninth induction phase application a challenge dose was applied. Another group of twelve male guinea pigs were treated in a similar manner as previous group except a 0.1% w/v suspension of 1-chloro-2,4-dinitrobenzene (DNCB) in a 50% ethanol:0.9% saline, positive control, was used. Also at challenge a naive control group of twelve male guinea pigs were treated with the test material.

RESULTS:

One animal in test group found dead at challenge dose. No irritation produced in test group during induction phase or at challenge dose. No irritation reported in naive control group at challenge dose.

One animal in positive control group (DNCB) found dead at day 2 of induction phase. Irritation produced during induction phase and challenge dose in positive control group indicated a sensitizing reation.

Based on these data it is concluded that the test material is not a skin sensitizer.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: Nonsensitizing.

(2) Acute Inhalation Toxicity Study: Biosearch Incorporated; Lab Report No. 86-4930A; May 13, 1986, MRID No. 400037-08.

PROCEDURE:

Ten male and ten female rats were exposed for 4 hours to a 4.62 ± 1.41 mg/L analytical concentration (nominal concentration = 10.5 mg/L; gravimetric concentration = 2.68 ± 0.69 mg/L). Temperature at which test was performed was reported to be 23 ± 2 °C. Relative humidity reported to range between 62 and 92%. Particle size reported to range between 0.4 and 9 um. Observations made for 14 days postexposure. Necropsy performed on all animals.

RESULTS:

No mortalities or toxic signs reported. Necropsy report revealed congested lungs and hemorrhagic lungs. LC_{50} reported to be greater than 4.62 mg/L analytical concentration.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: III - CAUTION.