Date: October 27, 1981

Subject: EPA File Symbol 19713-IN
Atrazine 5L Herbicide

From: Deloris F. Graham DFG 10/30/81
FHB/TSS
E 11/3/81

To: Robert Taylor
Product Manager (25)

Applicant: Drexel Chemical Company
P.O. Box 9306
2487 Pennsylvania Street
Memphis, Tennessee 38109

Active Ingredient:
Atrazine (2-chloro-4-ethylamino-6-isopropylamino-s-triazine.....50.81
Related compounds.....2.67%
Inert Ingredients.....46.52%

Background:

Submitted an Acute Oral, Acute Dermal, Acute Inhalation, Eye Irritation and Primary Dermal Irritation studies to support conditional registration of this product. Studies were conducted by Cosmopolitan Safety Evaluation, Inc. Data not accessioned. Cite-All Method of support is used.

Recommendation:

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

2. The appropriate signal word is CAUTION.

Label:

1. Precautionary statements proposed are adequate.

Review:

1. Acute Oral Toxicity Study: Cosmopolitan Safety Evaluation, Inc; C.S.E #0507A; July 29, 1981.

Procedures:

5M and 5F Sprague-Dawley rats weighing between 200 and 340 grams received a 5.0 g dose of the test substance. Observations were made twice daily for 14 days. Necropsy performed on all animals.

Results:

No mortalities. Symptoms included temporary loss of weight in all females and one male; one female had a swollen face; chromodacryorhea, and emaciated, but symptoms had resolved by day 9. Necropsy revealed opague area approximately 5 mm in diameter in intestines (cecum). LD_{50} for male and females greater than 5g/kg.

Study Classification:

Core Guideline Data.

Toxicity Category:

IV - CAUTION

2. Acute Dermal Toxicity Study: Cosmopolitan Safety Evaluation, Inc; C.S.E. #0507B, July 28, 1981.

Procedure:

5M and 5F New Zealand white rabbits weighing between 2.5 and 3.5 kg received 2.0 g of the test material at abraded skin sites under occlusive wrap for 24 hour exposure. Observations were made at end of 24 hour exposure period and daily 14 days thereafter. Necropsy performed on all animals.

Results:

No mortalities. No clinical symptoms observed. All rabbits had well defined erythema and slight to moderate edema. These local signs of irritation had resolved by day 7. No pathognomonic signs were observed at necropsy. LD_{50} greater than 2g/kg.

Study Classification:

Core Guideline Data.

Toxicity Category:

III - CAUTION

3. Acute Inhalation Toxicity Study: Cosmopolitan Safety Evaluation, Inc.; C.S.E. #0507C, July 31, 1981.

Procedure:

5M and 5F Sprague-Dawley rats weighing between 240 and 340 grams were exposed to an atmosphere containing a concentration of 8.4 mg of the test article per liter of air in a 47.4 liter plexiglass chamber. On one side near the top of the exposure chamber was a portal through which the test article and air flow were introduced, and at the opposite side near the bottom there was a portal for exhaust to which a vacuum pump was attached. The test article was established and maintained from the DeVilbiss Glass Nebulizer by using a Gast Air Pump supplying air at a measured pressure. Particle size and its geometric standard deviation were determined on two occasions using a Cascade Impactor. The average mass median diameter of the particles was 2.6 microns. The geometric standard deviation was determined to be $\pm$ 2.8 microns. Observations were made hourly during exposure and at 1, 3 and 5 hours after exposure and once daily for 14 days thereafter. Necropsy was performed on all animals.

Results:

No mortalities, no clinical signs observed and no abnormalities noted at necropsy. LC_{50} greater than 5 mg/l for 4 hours.

Study Classification:

Core Guideline Data.

Toxicity Category:

IV - CAUTION

4. Eye Irritation Study: Cosmopolitan Safety Evaluation, Inc, C.S.E. #0507D; July 29, 1981.

Procedure:

9 New Zealand white rabbits received a 0.1 ml aliquot of the test material in one eye each. Three of the rabbit's eyes were washed with distilled water 20 seconds after treatment. Observations were made at 24, 48 and 72 hours, and 4 and 7 days after treatment.

Results:

No corneal opacity or iris irritation present in unwashed or washed group. At 24 hour, 5/6 had conjunctive redness (5/6 = 1) in unwashed group and 3/3 in washed group (3/31); 2/6 discharge (2/6 = 1) in unwashed group. All irritation clear by day 4.

Study Classification:

Core Guideline Data.

Toxicity Category:

III - CAUTION

5. Primary Dermal Irritation Study: Cosmopolitan Safety Evaluation, Inc., C.S.E. #0507C; July 28, 1981.

Procedure:

6 New Zealand rabbits received 0.5 ml of the test material at 2 abraded and 2 intact skin sites per animal under occlusive wrap for 24 hour exposure. Observations were made at end of 24 hour exposure period and at 72 hours after treatment.

Results:

At 24 hours, slight to well-defined erythema in all animals. No edema present. All irritation had cleared by 72 hours. Primary Irritation Score - 0.46.

Study Classification:

Core Guideline Data.

Toxicity Category:

IV - CAUTION