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

005378

Date: July 20, 1982

Subject: EPA File Symbol: 264-GTG
Technical Napthyl Acetamide

From: Deloris F. Graham 7/26/82
FHB/TSS E 7/26/82

To: Robert Taylor
Product Manager (25)

Applicant: Union Carbide Agricultural Products Co.
P.O. Box 12014, T.W. Alexander Drive
Research Triangle Park, NC 27709

Active Ingredient:
1-Napthyl Acetamide 97.0%
Inert Ingredients 3.0%

Background: Submitted Acute Oral, Acute Dermal, Acute Inhalation, Eye Irritation and Primary Dermal Irritation Study. Studies conducted by MB Research Laboratories, Inc., Pharmakon Research International, Inc., and Union Carbide. Data under accession number 247584. Method of support not indicated.

Recommendation:

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

2. The Acute Inhalation Study is unacceptable to support conditional registration of this product. Please see Section 163.81-3 of the "Proposed Guidelines" for acceptable testing and reporting procedures.

3. The appropriated signal word is [redacted] DANGER.

Label:

1. The statement "Keep out of reach of children" must precede the signal word.

2. The statement "It is a violation of Federal law to use this product in a manner inconsistent with its labeling" must be placed under the heading "Directions for Use" followed by the storage and disposal statements.

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PC 27601

3. The precautionary statements must be revised to include:

> Corrosive. Causes irreversible eye damage. Wear safety goggles when handling. Harmful if swallowed. Avoid contact with skin.

Review:

1. Acute Oral Toxicity Study: Pharmakon Research International, Inc.; PH 402-UC-002-82; April 26, 1982.

Procedure: Five groups consisting of five male and five female rats received one of the following doses: 1000, 1500, 2000, 2500 and 3000 mg/kg orally. Observations made daily for 14 days. Necropsy performed on all animals.

Results: At 1500 mg/kg, 1/5 M and 2/5 F died; at 2000 mg/kg, 3/5 M and 5/5 F died; at 2500 mg/kg, 3/5 M and 4/5 F died; at 3000 mg/kg, 5/5 M and 5/5 F died.

Toxic signs included semi-prostration, piloerection, abnormal gait, abnormal stance, decreased activity and body tone, prostration, salivation, ptosis, tremors, hypersensitivity to touch, chromodacryarrhea, ataxia, body drop, vasoconstriction, and poor grooming.

Necropsy revealed stomach and intestines fluid-filled and distended of those animals dying during study. No visible lesions in animals sacrified at end of study. LD_{50} was 1690 mg/kg with 95% confidence limits of 1408 to 2028 mg/kg.

Study Classification: Core Guideline Data.

Toxicity Category: III - CAUTION

2. Acute Dermal Toxicity Study: Pharmakon Research International, Inc.; PH 402-UC-002; May 11, 1982.

Procedure: 5M and 5F rabbits received 2 g/kg of the test material at abraded skin sites under occlusive wrap for 24-hour exposure. Observations were made daily for 14 days. Necropsy performed on all animals.

Results: 1/10 animals died on day 11. Slight to moderate erythema and slight to moderate edema and skin scaling observed. Necropsy of the animal that died during the study revealed brown foci on lungs, discoloration of the intestines, heart and oral cavity. Necropsy of animals sacrificed at termination of study revealed no abnormalities. LD_{50} greater than 2 g/kg.

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Study Classification: Core Guideline Data.

Toxicity Category: III - CAUTION

3. Acute Inhalation Toxicity Study: MB Research Lab.; Project #MB 75-850; August 13, 1975.

Procedure: Ten male Wistar rats were exposed for one hour to a nominal concentration of at least 20,000 ppm in 51-liter closed chamber. Observation for 14 days postexposure.

Results: No deaths and no sign of toxicity.

Study Classification: Core Supplementary Data. Please see Section 163.81-3 of the Proposed Guidelines for acceptable testing and reporting procedures.

4. Eye Irritation Study: Pharmakon Research International; PH 421-UC-001-82; May 11, 1982.

Procedure: Nine rabbits received a 100 mg dose of the test material in one eye each. The treated eyes of three rabbits were washed immediately following treatment. Observation made at 24, 48 hours and 72 hours and 4, 7, 10 and 13 days posttreatment.

Results: At 24 hours, 2/6 animals of unwashed group and 1/3 animals of the wash group had corneal opacity (1/6=5, 1/6=40) (1/3=10); no iris irritation, 6/6 and 3/3 redness (3/6=1, 3/6=2) (3/3=2) and discharge (3/6=1, 1/6=2, 2/6=3) (2/3=1, 1/3=3); 6/6 & 2/3 chemosis (1/6=1, 4/6=2, 1/6=3) (1/3=1, 1/3=3).

At 7 days, 2/6 corneal opacity (1/6=30, 1/6=60); 3/6 & 1/3 redness (2/6=1, 1/6=2) (1/3=1); 2/6 & 1/3 chemosis (1/6=1, 1/6=2) (1/3=1); 2/6 discharge (1/6=1, 1/6=2).

At 13 days, 2/6 corneal opacity (1/6=10, 1/6=30); 1/3 redness (1/3=1); 2/6 chemosis (1/6=1, 1/6=2) and 1/6 discharge (1/6=1).

Study Classification: Core Guideline Data.

Toxicity Category: I-DANGER

Primary Skin Irritation: Union Carbide; Project Report 45-47; April 20, 1982

Procedure: Six New Zealand rabbits received 500 mg of the test material at two abraded and two intact skin sites per animal under occlusive wrap for 24-hour exposure. Observations made at 24 and 72 hours posttreatment.

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Results: No irritation observed at 24 or 72 hours posttreatment. Primary Irritation Score was zero.

Study Classification: Core Guideline Data.

Toxicity Category: IV- CAUTION

TECHNICAL

NAPTHYL ACETAMIDE

005378

FOR USE IN THE MANUFACTURE OF PLANT GROWTH REGULATORS

ACTIVE INGREDIENT:

1-NAPTHYL ACETAMIDE..... MINIMUM 97.0%

INERT INGREDIENTS: ..... MINIMUM 3.0%

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

DANGER

KEEP OUT OF REACH OF CHILDREN

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS & DOMESTIC ANIMALS

HARMFUL IF SWALLOWED. MAY CAUSE EYE DAMAGE, WEAR SAFETY GOGGLES WHEN HANDLING. AVOID CONTACT WITH SKIN AND EYES.

STATEMENT OF PRACTICAL TREATMENT

IN CASE OF EYE CONTACT FLOOD EYES IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION. IF SWALLOWED, CALL A DOCTOR OR POISON CONTROL CENTER. DRINK 1 OR 2 GLASSES OF WATER AND INDUCE VOMITING BY TOUCHING BACK OF THROAT WITH FINGER. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IN CASE OF SKIN CONTACT, FLUSH WITH PLENTY OF SOAP AND WATER

STORAGE AND DISPOSAL

AVOID CONTACT WITH OTHER PESTICIDES, SEEDS, FERTILIZERS OR FEED STUFFS. DO NOT USE IN EQUIPMENT OR IN CONTAINERS IN WHICH YOU HAVE HANDLED OR WILL HANDLE OTHER AGRICULTURAL CHEMICALS UNLESS THOROUGHLY CLEANED.

PESTICIDE, SPRAY MIXTURE, OR RINSE WATER THAT CANNOT BE USED ACCORDING TO LABEL INSTRUCTIONS MUST BE DISPOSED OF ACCORDING TO APPLICABLE FEDERAL, STATE, OR LOCAL PROCEDURES.

COMPLETELY EMPTY LINER BY SHAKING AND TAPPING SIDES AND BOTTOM TO LOOSEN CLINGING PARTICLES. EMPTY RESIDUE INTO EQUIPMENT. THEN DISPOSE OF LINER IN A SANITARY LANDFILL OR BY INCINERATION IF ALLOWED BY STATE AND LOCAL AUTHORITIES. IF DRUM CANNOT BE REUSED, DISPOSE OF IN THE SAME MANNER.

FOR MANUFACTURING OF PLANT GROWTH REGULATORS ONLY.

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DISTRIBUTED BY:

UNION CARBIDE AGRICULTURAL PRODUCTS COMPANY, INC.
P.O. Box 12014, T.W. Alexander Drive, Research Triangle Park, NC 27709

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