



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

006053

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

JUN 02 1986

MEMORANDUM

SUBJECT: EPA Registration Number: 264-29
Rootone

FROM: Deloris F. Graham *LHG 6/11/86*
Technical Support Section
Fungicide-Herbicide Branch *E 6/11/86*
Registration Division

TO: Henry Jacoby, PM 21
Fungicide-Herbicide Branch
Registration Division (TS-767C)

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

ACTIVE INGREDIENTS:

1-Naphthaleneacetamide	0.20%
Indole-3-butyric acid	0.10%
Thiram	4.04%
INERT INGREDIENTS:	95.66%

BACKGROUND:

Submitted Acute Oral, Acute Dermal, Acute Inhalation, Eye Irritation, Primary Dermal Irritation, and Dermal Sensitization studies. Studies conducted by Union Carbide's Bushy Run Research Center and American Biogenics Corporation. Data under Accession Number 260285. Method of support not indicated.

RECOMMENDATIONS:

1. FHB/TSS finds these data acceptable to support conditional registration of this product.
2. The appropriate signal word is CAUTION.

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LABEL:

Labeling submitted is acceptable.

REVIEW:

- (1) Acute Oral Toxicity Study: Bushy Run Research Center;
Report 48-129; September 18, 1985.

PROCEDURE:

Five male and five female rats each received a single 5000 mg/kg dose of the test material orally. Observations made for 14 days postdosing. Necropsy performed on all animals.

RESULTS:

No mortalities or abnormalities at necropsy reported. Sluggishness, lacrimation, salivation, and eye irritation were reported. LD₅₀ reported to be greater than 5000 mg/kg for males and females.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: IV - CAUTION.

- (2) Acute Dermal Toxicity Study: Bushy Run Research Center;
Report 48-129; September 18, 1985.

PROCEDURE:

Five male and five female rabbits with intact skin sites each were treated with 2000 mg/kg of the test material under occlusive wrap for 24-hour exposure period. Observations made for 14 days posttreatment. Necropsy performed on all animals.

RESULTS:

No mortalities or toxic signs reported. Necropsy report revealed lungs mottled light and dark red in two male rabbits. LD₅₀ reported to be greater than 2000 mg/kg for males and females.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: - III - CAUTION.

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- (3) Primary Skin Irritation Study: Bushy Run Research Center; Report 48-129; September 18, 1985.

PROCEDURE:

Six rabbits with intact skin sites each were treated with 500 mg of the test material under occlusive wrap for 24-hour exposure period. Observations made for 7 days posttreatment.

RESULTS:

No irritation reported.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: IV - CAUTION.

- (4) Eye Irritation Study: Bushy Run Research Center; Report 48-129; September 18, 1985.

PROCEDURE:

Six rabbits received 140 mg (= 0.1 ml) of the test material in one eye each. Observations were made for 7 days posttreatment.

RESULTS:

At 24 hours, 1/6 had corneal opacity (1/6 = 20); iris irritation (1/6 = 5); 5/6 conjunctive redness (2/6 = 1, 3/6 = 2); 4/6 conjunctive chemosis (2/6 = 3, 2/6 = 4); and 2/6 conjunctive discharge (6/6 = 3). All irritation except redness in 2/6 animals (2/6 = 1) had cleared. Redness in two animals had cleared by day 7.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: III - CAUTION.

- (5) Dermal Sensitization Study: Bushy Run Research Center; Report 48-151; October 31, 1985.

PROCEDURE:

Three groups consisting of five male and five female guinea pigs each were treated with one of the following substances: 10% w/v solution of test material [REDACTED] (negative control), or 0.3% w/v dinitrochlorobenzene solution (positive control) during induction and at challenge dose except a 0.1% w/v dinitrochlorobenzene was used at challenge for positive control.

During induction phase, animals received 0.3 ml doses once a week for 3 weeks. Two weeks after third induction phase application a challenge dose was administered. Observations made frequently during induction phase, and 24 and 48 hours after challenge dose. The study was reported to be conducted in two phases due to scheduling restrictions. One-half of each group was treated then the second half received initial treatment a week later.

RESULTS:

No irritation reported in test group or negative control group during induction phase or at challenge dose. However, tape irritation, depilatory irritation, or discoloration not limited to dose site was reported in test group. The positive control group produced irritation increasing in severity upon repeated dose during induction phase and produced a well-defined reaction during challenge with a more irritating concentration, thereby indicating a sensitization reaction.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: Nonsensitizing.

(6) Acute Inhalation Toxicity Study: American Biogenics Corporation; Study #420-2266; October 29, 1985.

PROCEDURE:

Five male and five female rats were exposed to a gravimetric concentration of 5.27 mg/L of test material for 4 hours (nominal concentration = 43.6 mg/L). Mean chamber temperature reported to be 70.9 °F and relative humidity 48.0 percent. Mass median diameter reported to be 5.0343 micrometers with 8.1020 geometric standard deviation. Observations made for 14 days postexposure. Necropsy performed on all animals.

RESULTS:

No mortalities or abnormalities at necropsy reported. Toxic signs reported included irregular breathing, crusty eye, nose, and muzzle. LC50 reported to be greater than 5.27 mg/L.

STUDY CLASSIFICATION: Core Guideline Data.

TOXICITY CATEGORY: IV - CAUTION.

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ROOTONE® brand

Rooting Hormone With Fungicide For Rooting Cuttings

ACTIVE INGREDIENTS:

1-Naphthaleneacetamide	0.20%
Indole-3-butyric acid.....	0.10%
Thiram (tetramethyl thiuramdisulfide).....	4.04%

INERT INGREDIENTS:..... 95.66%

EPA Reg. No. 264-29AA

EPA Est. No. 477-MD-01

KEEP OUT OF REACH OF CHILDREN

CAUTION

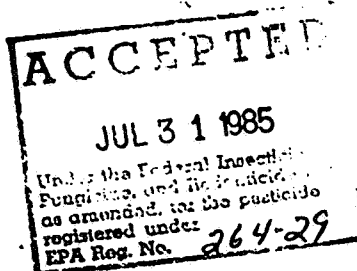
Precautionary Statements: See Side Panel.

IN CASE OF EMERGENCY TELEPHONE COLLECT (24 HOURS A DAY) IN U.S.A.
(304) 744-3487.
FOR GENERAL PRODUCT INFORMATION CALL 800-334-9745.

©UNION CARBIDE AGRICULTURAL PRODUCTS COMPANY, INC.
Post Office Box 12014, T.W. Alexander Drive
Research Triangle Park, NC 27709

NET WEIGHT:

APC-2467-137-55



H80075

0331G/Pending/06-27-85

PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes eye and skin irritation. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Avoid inhalation of dust. Do not use or store near food or feeds.

Consumption of alcoholic beverages increase the toxic effects of Thiram.

STATEMENT OF PRACTICAL TREATMENT

If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.

If in eyes, flush eyes with plenty of water. Get medical attention if irritation persists.

ENVIRONMENTAL HAZARDS

This pesticide product is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of wastes. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water or wetlands.

STORAGE AND DISPOSAL

STORAGE

Do not store near fertilizers, seed, insecticides, or fungicides.

PESTICIDE DISPOSAL

Wastes resulting from the use of the product may be disposed on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

For 1 pound canister: Completely empty canister into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For 50 pound drum: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be used, dispose of in the same manner.

DIRECTIONS FOR USE

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

Select cuttings (slips) from vigorous healthy plants. For most house plants, use tips 2" to 6" long from stems that break easily. For most shrubs, summer cuttings of half-ripened wood root best.

Remove any leaves or flowers at the base of the cutting. Dip the base into ROOTONE® about 1/4 inch deeper than it will be set in the rooting medium. Tap off any excess powder and insert cutting in a hole in the rooting medium with at least one node covered. Make holes wide enough so that no ROOTONE® is scraped off during planting. Firm medium around cutting to avoid air pockets.

Shade to keep the cuttings and medium moderately moist until they are rooted. This is 3 to 5 weeks or longer, depending on plant species.

Among the many plants that can be rooted are azalea, barberry, begonia, boxwood, chrysanthemum, crape myrtle, euonymus, forsythia, fuchsia, geranium, holly, ivy, juniper, lilac, pachysandra, privet, pyracantha, rhododendron, rose, spiraea, taxus (yew), and viburnum.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and upon reports of field experiences. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.