



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

JAN 14 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Willard F. Cummings
UNIROYAL CHEMICAL CO. INC.
74 AMITY ROAD
BETHANY, CT 06524

Subject: Label Amendment Submission of 08/10/93 in Response to PR Notice 93-7
EPA Reg. No. 400-398
HARVADE-25F

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with SoyCares on or paper that
contains at least 50% recycled fiber

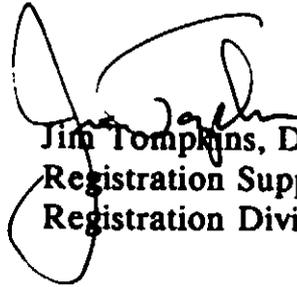
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

HARVADE®-25F

HARVEST GROWTH REGULANT FOR COTTON

ACCEPTED
with COMMENTS
in EPA Letter Dated
JAN 14 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
400-398



COMPOSITION

Active Ingredient: (% by weight)	
dimethipin (2,3-Dihydro-5,6-dimethyl-1,4-dithiin 1,1,4,4-tetraoxide*)	22.4%**
Inert ingredients	77.6%
Total:	100.0%

*U.S. Patent No. 3,920,438

**Contains 2 pounds of active ingredient per U. S. gallon.

UNIROYAL CHEMICAL COMPANY, INC., Middlebury, CT 06749
EPA REG. NO. 400-398
EPA EST. NO.

002WPS

NET CONTENTS

KEEP OUT OF REACH OF CHILDREN DANGER — PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

STATEMENTS OF PRACTICAL TREATMENT

- IF ON SKIN: Wash thoroughly with soap and water. Call a physician immediately.
- IF SWALLOWED: Drink promptly a large quantity of milk, egg whites or gelatin solution. If these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately. Note to Physician: Probable mucosal damage may contraindicate use of gastric lavage.
- IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Contact a physician.
- IF INHALED: Remove to fresh air; if abnormal symptoms develop, contact a physician.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive, causes burns. Do not get in eyes, on skin or on clothing. Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing vapors.

PERSONAL PROTECTIVE EQUIPMENT:
 Wear protective clothing to prevent contact with the product. Avoid breathing vapors. Avoid contact with skin and eyes. Wash hands thoroughly after handling. Do not eat, drink, or use tobacco while using this product. Remove clothing immediately if pesticide gets inside. Wash immediately and thoroughly. Do not reuse clothing. Do not use in enclosed areas. Do not use in areas where food is stored or prepared. Do not use in areas where children or pets are present. Do not use in areas where water is used for drinking. Do not use in areas where water is used for irrigation. Do not use in areas where water is used for livestock. Do not use in areas where water is used for fish. Do not use in areas where water is used for shellfish. Do not use in areas where water is used for wildlife. Do not use in areas where water is used for birds. Do not use in areas where water is used for mammals. Do not use in areas where water is used for reptiles. Do not use in areas where water is used for amphibians. Do not use in areas where water is used for invertebrates. Do not use in areas where water is used for plants. Do not use in areas where water is used for animals. Do not use in areas where water is used for humans. Do not use in areas where water is used for the environment. Do not use in areas where water is used for the world.

USER SAFETY RECOMMENDATIONS

- Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
 - Remove clothing immediately if pesticide gets inside. Wash immediately and thoroughly.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands (swamps, bogs, marshes and potholes). Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from treated area.

BEST AVAILABLE COPY

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

Do not apply this product through any type of irrigation system.

Do not apply this product in a way that will contact workers of other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the Agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 29 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls over long-sleeved shirt and long pants
- chemical resistant gloves such as barrier laminate, or nitrile rubber, or neoprene rubber, or viton.
- chemical-resistant footwear plus socks
- chemical-resistant headgear for overhead exposure

MIXING INSTRUCTIONS:

SHAKE CONTAINER VIGOROUSLY BEFORE USE. Fill the spray tank with 2/3 of the required amount of water. Add the desired amount of HARVADE-25F and remaining required amount of water. The HARVADE-25F will suspend easily with minimum agitation. To assure that container is emptied - TRIPLE RINSE (or equivalent) INTO SPRAY TANK.

GENERAL INFORMATION

HARVADE-25F is a plant growth regulant that effects certain plant processes which lead to defoliation in cotton. Since HARVADE-25F must enter the plant through the leaves for optimum activity, it must be applied in a manner that will allow maximum penetration through the leaf surface. Complete coverage of the entire plant is essential for optimum effectiveness. HARVADE-25F will improve the harvest operation by also desiccating most mature morningglory species. Desiccation of other weed species such as sicklepod, croton, and tearweed has been observed. Good coverage of these above weeds is necessary for optimum results.

APPLICATION EQUIPMENT:

Nearly all spray application equipment is suitable for applying HARVADE-25F if fine spray droplets can be deposited. If aerial equipment is used, it should be fitted with a fixed boom set at 45 to 90° relative to the trailing edge of wing and flown 10 to 12 ft. above the crop canopy.

COMPATIBILITY:

HARVADE-25F is compatible with most commonly used cotton desiccants, defoliants, and insecticides. HARVADE-25F has been shown to be incompatible with EPN when used as a tank mix. Consult your supplier or Uniroyal Chemical for details.

APPLICATION TIMING:

Optimum defoliation will be obtained when HARVADE-25F is applied to mature cotton plants; i.e. 70% or more of the bolls open, no active growth, lower leaves have purple tinge. Apply 7 to 14 days prior to anticipated harvest.

APPLICATION RATE:

Air Application:

Mix 1 to 1½ pts. (16 to 20 fl. oz.) of HARVADE-25F in a minimum of 5 gallons of spray solution per acre. If cotton is rank or conditions favor regrowth, the higher rate is desirable. A second application of HARVADE-25F at 1 pint (16 fl. oz./A) may be necessary 5 to 7 days later. See Application Notes.

Ground Application:

Mix 1 to 1½ pts. (16 to 20 fl. oz.) of HARVADE-25F in 10 to 20 gallons of spray solution per acre. If cotton is rank or conditions favor regrowth, the higher rate is desirable. A second application of HARVADE-25F at 1 pint (16 fl. oz./A) may be necessary 5 to 7 days later. See Application Notes.

APPLICATION NOTES:

Partial defoliation from the first application will most likely result from one or more of the following conditions:

- Rank cotton foliage is dense enough to inhibit spray droplets from reaching the bottom leaves.
- Plants are actively growing, with new growth and fruiting evident at the top.
- Bolls are not 70% open.
- Cotton is drought stressed. Under this condition, applications should be made before mid morning or at late afternoon.
- Night temperatures are below 55°F for 3 to 4 nights after application.
- Rainfall occurs within 6 hours after application.

Under these conditions a second application of at 1 pint (16 fl. oz./A) may be required 5 to 7 days after initial application. If only one application is desired on rank or actively growing cotton, a mixture of HARVADE-25F with a phosphate defoliant has been shown to be advantageous.

TANK MIX COMBINATIONS: Before applying a tank mix, read each label and follow the Precautionary Statements on each label.

HARVADE-25F plus PREP®*

HARVADE-25F may be applied with 1½-2½ pints of PREP® to enhance boll opening and control regrowth. Apply this tank mixture when the bolls are 60-70% open.

HARVADE-25F plus GRAMOXONE® SUPER**

On rain-belt cotton if a high percentage of cotton leaves are still actively growing, then 4 to 6 fl. oz./A of GRAMOXONE® SUPER should be added to the labeled rate of HARVADE-25F for more complete defoliation.

HARVADE-25F plus DROPP® 50WP***:

Under conditions that promote excessive regrowth, a tank mix of HARVADE-25F at 1½ pint (20 fl. oz./A) plus DROPP 50WP at 0.1 to 0.2 lb/A provides excellent regrowth control. This combination also provides defoliation when night time temperatures are below 60° to 70°F for 2 to 3 nights preceding or following application.

*PREP® is the registered trademark of Rhone Poulenc Ag Company

**GRAMOXONE® SUPER is the registered trademark of ICI Americas, Inc.

***DROPP® is the registered trademark of NOR-AM Chemical Co.

USE PRECAUTIONS

1. Do not plant rotational crops within 6 months after application.
2. Keep HARVADE-25F drift from non-target areas.
- 3a. Do not apply HARVADE-25F directly to, or permit mist to drift onto citrus, broccoli, almonds, grapes, peppers, tomatoes, lettuce, alfalfa, sugarbeets or wheat. These crops may sustain significant injury if contacted with HARVADE-25F.
- b. Do not apply HARVADE-25F to, or permit mist to drift onto soil that will subsequently be seeded to peppers, tomatoes, lettuce, broccoli, alfalfa or sugarbeets. Significant crop injury may occur from such an application.
- c. Do not apply HARVADE-25F to, or permit mist to drift onto, irrigation water that will subsequently be applied to peppers, tomatoes or lettuce.

SHAKE WELL BEFORE USING

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.
PESTICIDE DISPOSAL: Pesticides wastes are acutely hazardous. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT NOTICE—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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