

United States Environmental Protection Agency
Washington, D.C. 20460

Office of
Prevention, Pesticides and
Toxic Substances

OCT 8 1993

Nang-Ly Chow, Ph D
NOR-AM CHEMICAL COMPANY
3509 SILVERSIDE ROAD
WILMINGTON DE 19803

Subject: Label Amendment Submission of 06/17/93
in Compliance with WPS Labeling Requirements
EPA Reg No. 45639-89
DROPP COTTON DEFOLIANT

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)

2 of 7
Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

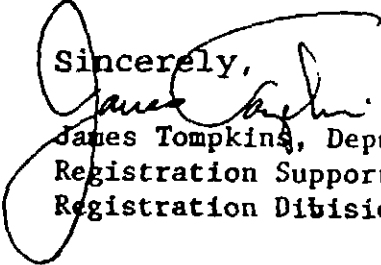
Hand or courier deliveries of final labels may be made to:

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

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,


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

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if Swallowed, Inhaled, or Absorbed Through the Skin. Avoid Breathing Spray Mist. Avoid Contact with Skin, Eyes, and Clothing. Do Not Contaminate Food or Feedstuffs.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area.

STORAGE AND DISPOSAL

STORAGE: Do not store box under wet conditions. Handle box carefully when stored at temperatures of less than 50°F to avoid breakage of soluble bags.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty box into application equipment. Then dispose of empty box in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

DO NOT REUSE EMPTY CONTAINER.

IN CASE OF FIRE, LEAKY OR DAMAGED CONTAINERS, OR OTHER EMERGENCY, REPORT AT ONCE BY TOLL-FREE TELEPHONE TO: 800-424-9300.

GENERAL INFORMATION

DROPP® 50WP cotton defoliant is used for removal of leaves prior to harvesting. DROPP disperses easily in water and can be used in any ground and aircraft equipment designed for application of wettable powders. It may take several days before the effect of DROPP becomes noticeable. Adverse conditions, such as low temperatures, may require higher dosages and/or longer times for more complete defoliation. DROPP inhibits regrowth after defoliation and thus reduces staining of lint during harvesting and ginning.

USE PRECAUTIONS:

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

DO NOT ALLOW SPRAY DRIFT TO CONTACT CROPS OTHER THAN MATURE COTTON OR COTTON WHICH YOU DESIRE TO DEFOLIATE.

Particular care should be taken when applying DROPP 50WP adjacent to lettuce, citrus, or cantaloupe. Tank mixes with organophosphates may increase non-target crop phytotoxicity.

Rainfall within 24 hours after application will reduce the effectiveness of DROPP. Use only freshly prepared sprays. Do not store spray mixture overnight. Do not feed foliage from treated cotton plants or gin trash to livestock.

Do not plant small grain, sorghum, corn or root crops earlier than two weeks after application of DROPP. Do not plant legumes, alfalfa or leafy vegetables earlier than two months after application of DROPP. Do not plant lettuce or carrots earlier than nine (9) months after application of DROPP 50WP. Do not use immature crops for food or feed.

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 in a way that will contact workers or 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 40 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 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
- > Waterproof gloves
- > Shoes plus socks

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Refer to any applicable supplemental labeling for important additional use directions. Supplemental labeling must be in the possession of the user at the time of application.

TIME OF APPLICATION: Apply DROPP 50WP cotton defoliant only to mature cotton plants when 60–70% or more of the bolls are open, and the remaining bolls are determined to be mature.

A boll is mature when it is too hard to be dented when squeezed between thumb and fingers, too hard to be sliced with a sharp knife, and when the seed coat becomes light brown in color.

Apply DROPP 50WP at least 5 days prior to anticipated harvest.

NOTE: Good defoliation with DROPP is dependent upon three factors:

1. High air temperature
2. High humidity
3. High moisture content in leaf of cotton plant

Use of DROPP 50WP when nighttime temperatures are expected to fall below 60°F can result in less than desirable defoliation and/or regrowth inhibition.

Performance of DROPP 50WP alone or in tank mixes is variable under low temperatures. Ideally, nighttime temperatures 2–3 days following application should be above 60°F or total defoliation and regrowth inhibition can be reduced. Use of DROPP 50WP on heat and drought-stressed cotton (low leaf moisture, thick cuticle, etc.) may result in less than satisfactory defoliation and regrowth inhibition.

USE OF ADJUVANTS (CROP OILS): The use of adjuvants such as petroleum-based crop oils or penetrating oils approved for use on growing crops have been shown to improve performance during low nighttime temperatures (60–65°F) or when defoliating drought-stressed cotton. Refer to specific adjuvant label for rate recommendations.

The use of adjuvants are recommended when applying DROPP 50WP in the desert Southwest (i.e., Arizona and California).

CAUTION: The addition of adjuvants can cause desiccation and/or leaf freezing during periods of high temperatures. Compounds that desiccate leaf tissue are not recommended.

MIXING INSTRUCTIONS: Fill the spray tank with one-half of the total amount of water to be used. After opening each box to be used, open its foil liner. Immediately dump the entire contents of the required number of boxes of soluble bags into the mix tank. Fill the tank with the additional quantity of water required and then start the agitator. Use entire contents of each box.

TANK MIX ADJUVANTS: When using tank mixes of DROPP 50WP and organophosphates, the use of a surfactant or compatibility agent is recommended to improve tank clean-out and overall defoliation. Prior to mixing in the spray tank, a small scale compatibility test should be conducted.

Use only products which are exempt from tolerance under 40 CFR 180.1001.

Always follow the mixing instructions on the label of the appropriate adjuvant.

APPLICATION: Use the specified dosage of DROPP 50WP cotton defoliant in sufficient amount of water to give complete coverage of the foliage with uniform wetting of leaf surfaces. Agitate the spray mix during application.

DOSAGE: One box (5 x 1 lb bags) of DROPP treats 12.5–25 acres (0.2–0.4 lbs DROPP per acre). Apply in 10–25 gallons of spray per acre by ground equipment and 2–10 gallons per acre by air. Use the higher rates during periods of low temperatures (60–65°).

Two applications not exceeding a total of 1 box per 8.3 acres (0.6 lbs./ac.) may be necessary to defoliate rank cotton.

BOTTOM DEFOLIATION FOR USE IN ARIZONA ONLY: DROPP 50WP may be used as an aid to improve air circulation and help reduce boll rot caused by moisture.

Apply DROPP 50WP at 0.1 lbs. formulated product per acre in 10–25 gallons of water per acre.

Application to bottom 1/3 of plant only recommended.

Timing of application should be based upon the latest date when ground application equipment can enter the field without crop damage.

PRE-CONDITIONING FOR USE IN ARIZONA AND CALIFORNIA ONLY: DROPP 50WP may be used as a pre-conditioner to enhance the activity of a defoliant application.

Apply DROPP 50WP at 0.1–0.2 lbs. formulated product per acre. Apply in 10–25 gallons of water per acre by ground application or 2–10 gallons of water per acre by aerial application.

Timing of application is recommended to be 7–14 days prior to the use of another defoliant. Refer to the second product label prior to use for complete recommendations.

TANK MIX OF DROPP® 50WP PLUS PREP(1)

The tank mix of DROPP 50WP + Prep is recommended to improve overall defoliation, and as an aid in accelerating the opening of mature unopened cotton bolls. Best activity will be obtained where the tank mix is applied to mature cotton plants with 60% open bolls and the remaining bolls are determined to be mature (See Time Of Application section of this label). Do not apply tank mix before sufficient unopened bolls have matured to produce the desired cotton yield. If nighttime temperatures are expected to fall below 60°F, unsatisfactory defoliation and regrowth inhibition may result. Certified cotton seed producers should determine boll and seed maturity prior to treatment.

Apply DROPP 50WP at a rate of 0.1–0.4 lbs. formulated product plus Prep at 1.0–2.0 lbs. active ingredient per acre.

Higher rate of DROPP should be used where excessive re-growth is anticipated, or during cooler temperatures.

Apply as a dilute spray as follows:

Application Gal.	Water/Acre
Aerial	3-10
Ground	10-50

TANK MIX OF DROPP 50WP PLUS DEF 6(*) OR DROPP 50WP PLUS FOLEX 6 EC(*) FOR USE IN LA., MS., ARK., ALA., GA., NC., SC., TN., TX. ONLY. ADDITIONALLY, TANK MIX OF DROPP 50WP PLUS DEF 6 CAN BE USED IN CA., AZ.: The tank mix of DROPP 50WP and DEF 6 or FOLEX 6 EC is recommended to improve defoliation and inhibit regrowth under less than ideal conditions. Less than ideal conditions are those when the nighttime temperatures are expected to be 60°F on the date of application and for three days following application.

Best activity will be obtained when the tank mix is applied to mature cotton plants with 60% or more open bolls.

RATE OF APPLICATION

DROPP 50WP + DEF 6 = Use 0.1-0.4 lbs

DROPP 50WP + 0.5-2.0 pints DEF 6

DROPP 50WP + FOLEX 6 EC = Use 0.1-0.4 lbs

DROPP 50WP + 0.5-2.0 pints FOLEX 6 EC

Higher rate of DROPP 50WP should be used where excessive regrowth is anticipated.

Maximum rates of DROPP and phosphate defoliant applied in a tank mix during very high air temperatures can cause desiccation.

Use lower rate of DEF 6 or FOLEX 6 EC under ideal nighttime temperature conditions (65°F); higher rate during less than ideal or adverse conditions.

Apply as a dilute spray in 5-10 gallons of water per acre by air or 10-25 gallons of water per acre with ground equipment.

When applying DEF 6 or FOLEX 6 EC defoliant plus DROPP 50WP as a tank mix, the following mixing sequence is recommended:

1. Add required water to spray tank, agitate
2. Add DROPP 50WP according to label directions (see mixing instructions)
3. Add DEF 6 or FOLEX 6 EC according to rate desired after the DROPP 50WP has completely dispersed.

A second application of the labeled tank mix may be made where necessary.

Refer to DEF 6 and FOLEX 6 EC labeling for additional use directions and cautions when using tank mixtures of DROPP 50WP and those products.

DO NOT USE TANK MIX OF DROPP 50WP PLUS DEF 6 OR FOLEX 6 EC IN THE RIO GRANDE VALLEY COUNTIES OF STARR, HIDALGO, WILLACY, AND CAMERON.

IMPORTANT CLEAN-OUT INSTRUCTIONS

Tank mixes of DROPP 50WP with organophosphates may form a residue in application equipment. While still fresh and moist, this residue can be removed by flushing the entire system with a commercial tank cleaner. We have found that tank cleaners such as Cleaner Concentrate manufactured by Valco Chemical Division of Haringen, Texas and Tank and Equipment Cleaner manufactured by Loveland Industries, Inc. of Greeley Colorado, are effective for removing these fresh residues.**

Do not allow the spray solution to dry in the application equipment. Immediately following application, clean all equipment (mix tanks, pumps, transfer lines, application tanks, sumps, booms, nozzles and all related equipment) thoroughly with cleaner and water.

Should small quantities of DROPP 50WP remain in inadequately cleaned tanks, they may be released during subsequent applications and may cause damage to crops. NOR-AM Chemical Company accepts no liability for damage to crops due to inadequately cleaned tanks.

Sequential Application Precaution

Do not apply sequential application of DROPP 50WP following any defoliant or desiccant except DROPP 50WP used alone or DROPP 50WP tank mixes. Reduced activity of the second treatment will result.

**In limited trials, these cleaners have shown promise in cleaning dried tank residues. The procedure for removing dried residues requires allowing the diluted cleaning solution to stand in equipment, filled to capacity, for 7 days followed by thorough flushing.

*Prep is a trademark of Rhone-Poulenc, Inc.

*DEF 6 is a registered trademark of Mobay Chemical Corporation, Agricultural Chemical Division.

*FOLEX 6 EC is a registered trademark of Rhone-Poulenc, Inc., Agrochemical Division.

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IMPORTANT: READ BEFORE USE


By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, because of extreme weather and soil conditions, manner of use and other factors beyond NOR-AM Chemical Company's control, it is impossible for NOR-AM to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OR MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of NOR-AM Chemical Company is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. UNDER NO CIRCUMSTANCES SHALL NOR-AM CHEMICAL COMPANY BE LIABLE FOR ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM USE OR HANDLING OF THIS PRODUCT.

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