264-700



11-2-2004

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

NOV - 2 2004

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Ms. Danielle A. Larochelle Bayer CropScience P.O. Box 12014 2 T.W. Alexander Dr. Research Triangle Park, NC 27709

Dear Ms. Larochelle:

Subject:

Minor Technical Formula Change (Reduce Nominal Concentration Claim) And

Label Revision Amendment (Reduce Ingredient Statement Claim)

Dropp® SC Cotton Defoliant EPA Registration No. 264-700

Your Amendment Application Resubmission

Dated July 27, 2004

The labeling, referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable and supercedes all previously accepted ones. A stamped copy is enclosed for your records. Submit one (1) copy of your final printed labeling before you release the products for shipment.

The basic Confidential Statement of Formula (CSF), dated 04/12/04, is acceptable. The basic CSF supercedes all previously submitted formulations.

For the above referenced subject product with EPA Registration No. <u>264-700</u>, please disregard the Agency correspondence dated October 8, 2004.

Sincerely Yours,

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Joanne I. Miller Product Manger (23) Herbicide Branch Registration Division (7505C)

Enclosure

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## Dropp® SC COTTON DEFOLIANT

For Agricultural Use Only		
ACTIVE INGREDIENT: Thidiazuron (N-phenyl-N'-1,2,3-thiadiazol-5-ylurea)*	41.0%	
INERT INGREDIENTS:	59.0%	
*Contains 4.0 lbs of thidiazuron per gallon.	TOTAL 100%	
EPA Reg No. 264-700	EPA Est. No. 33689-WG-1	

# KEEP OUT OF REACH OF CHILDREN CAUTION — CAUCION

For <u>MEDICAL</u> And <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

#### **FIRST AID**

	FIRST AID
IF SWALLOWED:	Immediately call a poison control center or doctor for treatment advice.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Have person sip a glass of water if able to swallow.
	Do not give anything by mouth to an unconscious person.
IF INHALED: • Mo	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
	Call a poison control center or doctor for further treatment advice.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
	Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing.
	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
	For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.
Have the p	product container or label with you when calling a poison control center or doctor or going for treatment.

#### 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, une detergent and hot water. Keep and wash PPE separately from other laundry.

ACCEPTED

NOV - 2 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the posticide registered under EPA Reg. No.

264-700



#### **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**

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

Do not contaminate water, food or feed by storage or disposal.

#### **PESTICIDE STORAGE**

Store at temperatures below 100° F. If allowed to freeze, remix before using.

#### PESTICIDE DISPOSAL

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

#### CONTAINER DISPOSAL

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.

#### RETURNABLE -- REFILLABLE CONTAINERS

This material may be repackaged in refillable containers by Bayer CropScience or a registered establishment under contract to Bayer CropScience. After use, return the container to the point of purchase or designated locations. This container must only be refilled with Dropp® SC Cotton Defoliant. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. If the container is not being refilled, return it to the point of purchase.

#### DO NOT REUSE EMPTY CONTAINER

#### **GENERAL INFORMATION**

Dropp® SC 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. 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.

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 the following crops earlier than the specified periods after the application of Dropp® SC:

Small grain, sorghum, corn or root crops (except carrots, onions, and sugar beets)	two (2) weeks
Legumes (including alfalfa)or leafy vegetables (except lettuce and spinach)	two (2) months
Sugar beets	four (4) months
Carrots, onions, or spinach	nine (9) months
Lettuce	nine (9) months
	and only following deep plowing (12–15 inches).

Do not use immature crops for food or feed.

Do not allow spray drift to contact crops other than the target crop of mature cotton, or cotton which you desire to defoliate, as this product may injure or defoliate other crops.

Particular care should be taken when applying Dropp® SC adjacent to lettuce, citrus, or cantaloupe. Tank mixes with organophosphates may increase nontarget crop phytotoxicity.

#### PRACTICES TO LOWER THE POTENTIAL FOR DRIFT ONTO NONTARGET CROPS

During applications, particularly under windy conditions, Dropp® SC may drift to nontarget crops.

To help reduce the drift potential, use the following practices:

- Do not apply Dropp® SC by ground or air when wind speeds exceed ten (10) miles per hour at the time of application. Follow local recommendations if wind speeds of less than ten (10) miles per hour are specified in those recommendations.
- Use of low nozzle pressure (20–30 psi) is recommended.
- Do not apply Dropp® SC when a temperature inversion is present or when conditions favor an inversion prior to completing
  application(s).
- Additionally, do not apply Dropp® SC by air within one-half (1/2) mile of lettuce. Do not apply Dropp® SC by ground equipment within 100 feet of lettuce.

#### PRACTICES TO LOWER DRIFT POTENTIAL ONTO NON-TARGET CROPS IN THE RIO GRANDE VALLEY OF TEXAS

To help reduce the drift potential, use the following practices:

- Do not apply Dropp® SC by ground or air when wind speeds exceed ten (10) miles per hour at the time of application. Follow local recommendations if wind speeds of less than ten (10) miles per hour are specified in those recommendations.
- Use of low nozzle pressure (20-30 psi) is recommended.
- Do not apply Dropp® SC when a temperature inversion is present or when conditions favor an inversion prior to completing application(s).
- Use the largest nozzle orifice possible which permits proper deposition and coverage of product.
- In addition, for citrus crops, do not apply Dropp® SC by air when citrus in flush is within five (5) miles downwind of the point of application. Do not apply Dropp® SC by ground when citrus in flush is within one-half (1/2) mile downwind of the point of application.

#### **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:

- Coveralis
- Waterproof gloves
- · Shoes plus socks

#### TIME OF APPLICATION

Apply Dropp® SC Cotton Defoliant only to mature cotton plants when the last boll you expect to harvest is mature. A boll can be described as "mature" when it is too hard to be dented when squeezed between thumb and fingers, is difficult to slice with a sharp knife, and/or when seeds cut in cross sections have fully developed cotyledons, as evidenced by an absence of jelly within the seed.

Apply Dropp® SC at least 5 days prior to anticipated harvest.

**NOTE:** Good defoliation with Dropp® is dependent upon three factors:

- 1. Actively growing cotton
- 2. High humidity
- 3. High moisture content in leaf of cotton plant

Use of Dropp® SC alone (without a tank mix partner) when nighttime temperatures are expected to fall below 60°F can result in less than desirable defoliation and/or regrowth inhibition.

Performance of Dropp® SC is variable under low temperatures. Ideally, nighttime temperatures 2–3 days prior to and following application should be above 60°F or total defoliation and regrowth inhibition can be reduced.

Use of Dropp® SC 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 has 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 is recommended when applying Dropp® SC in the desert Southwest (i.e., Arizona and California).

PRECAUTION: The addition of adjuvants can cause desiccation and/or leaf freezing during periods of high temperatures. The use of compounds that desiccate leaf tissue is not recommended.

#### MIXING INSTRUCTIONS

Fill the spray tank with one-half of the total amount of water to be used. Begin agitation and add the recommended amount of Dropp® SC. Fill the tank with the additional quantity of water required. Maintain sufficient agitation to ensure a uniform spray mixture during application.

#### TANK MIX ADJUVANTS

When using tank mixes of Dropp® SC 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® SC Cotton Defoliant in sufficient amount of water to give complete coverage of the foliage with uniform wetting of leaf surfaces. Apply in 10–25 gallons of spray per acre by ground equipment and 3–10 gallons per acre by air. Agitate the spray mix during application.

#### DOSAGE

One gallon of Dropp® SC treats 20 - 40 acres (0.1-0.2 lb. active ingredient/acre). Use the higher rates during periods of low temperatures (60°-65°F).

Two applications not exceeding a total of 9.6 ounces (0.3 lb. active ingredient/acre) may be necessary to defoliate rank cotton.

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

Apply Dropp® SC at 1.6 ounces ( 0.05 lb. active ingredient/acre) formulated product 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.

PRECONDITIONING: Dropp® SC may be used as a pre-conditioner to enhance the activity of a defoliant application.

Apply Dropp® SC at 1.6-3.2 ounces (0.05-0.1 lb. active ingredient/acre) formulated product per acre.

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® SC PLUS FINISH® 6 PRO OR PREP™ FOR BOLL OPENING: The tank mix of Dropp® SC plus FINISH® 6 PRO or 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. (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® SC at a rate of 1.6 - 6.4 ounces (0.05 - 0.2 lb. active ingredient/acre) formulated product plus FINISH® 6 PRO at 1.3 - 2 pt/A (1.0 - 1.5 lbs. active ingredient per acre) or Prep<sup>™</sup> at 1.3 - 2.6 pt/A (1.0-2.0 lbs. active ingredient per acre). The higher rate of Dropp® SC should be used where excessive regrowth is anticipated, or during cooler temperatures.

TANK MIX OF DROPP® SC PLUS FINISH® 6 PRO FOR DEFOLIATION ENHANCEMENT: Lower rates of FINISH® 6 PRO may be tank mixed with Dropp® SC to enhance defoliation without providing boll opening activity. FINISH® 6 PRO may still be applied as a sequential treatment for boll opening following an application of Dropp® SC plus FINISH® 6 PRO at a defoliation enhancement rate. Read and follow the FINISH® 6 PRO label, and do not exceed a maximum of 2.0 lb. ethephon ai/acre for combined uses per acre per year.

Apply Dropp® SC at a rate of 1.6 – 6.4 ounces (0.05 – 0.2 lb active ingredient/acre) formulated product plus FINISH® 6 PRO at 5 ounces per acre (0.23 lbs. active ingredient/acre). The higher rates of Dropp® SC should be used where excessive regrowth is anticipated, or during cooler temperatures.

TANK MIX OF DROPP® SC PLUS DEF ® 6 OR DROPP® SC PLUS FOLEX® 6 EC: The tank mix of Dropp® SC 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® SC + Def ® 6** = 1.6 - 6.4 ounces Dropp® SC + 0.5 - 2.0 pints Def® 6.

Dropp® SC + Folex® 6 EC = 1.6 - 6.4 ounces Dropp® SC + 0.5 - 2.0 pints Folex® 6 EC.

Higher rate of Dropp® SC should be used where excessive regrowth is anticipated.

Maximum rates of Dropp® and phosphate defoliants 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.

When applying Def ® 6 or Folex® 6 EC defoliant plus Dropp® SC as a tank mix, the following mixing sequence is recommended:

- 1. Add required water to spray tank, agitate.
- 2. Add Dropp® SC according to label directions (see mixing instructions).
- 3. Add Def ® 6 or Folex® 6 EC according to rate desired after the Dropp® SC has completely dispersed.

A second application of the labeled tank mix may be made where necessary, but not exceeding a total of 0.3 lb. active ingredient of Dropp® SC per acre.

Refer to Def ® 6 and Folex® 6 EC labeling for additional use directions and cautions when using tank mixtures of Dropp® SC and those products.

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

#### IMPORTANT CLEANOUT INSTRUCTIONS

Tank mixes of Dropp® SC 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. Refer to Bayer CropScience technical information bulletins for recommended tank cleaners which have been found to effectively remove 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® SC remain in inadequately cleaned equipment, they may be released during subsequent applications and may cause damage to crops. Bayer CropScience accepts no liability for damage to crops due to inadequately cleaned equipment.

### SEQUENTIAL APPLICATION PRECAUTION

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

\*\*In limited trials, the recommended 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.

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, 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, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

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**NET CONTENTS: 1 GALLON** 

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Dropp® SC (PENDING) Submitted 04/12/04.