

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

MAY 3 1 1994

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Warren A. Davis RHONE-POULENC AG COMPANY P. O. Box 12014 Research Triangle Park, NC 27709

Subject:

Label Amendment Submission of 04/18/94 in Response to PR Notice 93-7

EPA Reg. No. 264-380

PREP PLANT REGULATOR FOR COTTON

# 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 subject to the comments reflected on the enclosed sheet. 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:

By the next label printing make all the specified changes to your labeling. 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.

Page 2

Submit the rinal 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

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division

Warren A. Davis RHONE-POULENC AG COMPANY BOX 12014 RESEARCH TRIANGLE PARK NC 27709

Comment for: EPA Reg Nr.264-380 PREP PLANT REGULATOR FOR COTTON

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

Correct the typographical errors circled on your proposed label.

# PREPTM 4 PLANT REGULATOR FOR COTTON

FOR COMMERCIAL USE OR AGRICULTURAL USE ONLY.

NOT FOR RESIDENTIAL USE.

**ACTIVE INGREDIENT:** 

Ethephon [(2-chloroethyl) phosphonic acid)\* .......39.9%

\*This product contains 4 pounds ethephon per gallon.

EPA Reg. No. 264-380

EPA Est. No. 264-PA-01

1

# 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.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-334-9745

The use of this product for a variety of plant growth regulation uses is covered by United States and foreign patents including U.S. Patents 3,879,188 and 4,240,819. No license is granted to use this product in countries other than the United States or for any use not contemplated by this label. Liability for patent infringement may result from use or sale of this product outside the United States.

## STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. GET MEDICAL ATTENTION, PREFERABLY AN OPHTHAL MOLOGIST.

IF ON SKIN: Immediately wash with plenty of soap and water.

IF SWALLOWED: Do not induce vorniting. Promptly drink a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration. Administer oxygen if necessary. GET MEDICAL ATTENTION.

#### NOTE TO PHYSICIAN

No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

Victims of severe overexposure, by inhalation, should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema. In a victim of overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophageal perforation. This material is an acid, but the use of alkaline substances to neutralize it is contraindicated.

#### PRECAUTIONARY STATEMENTS

Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin, or on clothing.

Harmful or fatal if swallowed. Avoid contamination of food.

ACCEPTED
with COMMENTS
In EPA Letter Dated

tinder the Federal Insecticide, Fundicide, and Hodenticide Act as amended, for the pesticide registered under EPA Reg. No.

#### NOTE TO PHYSICIAN

No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

Victims of severe overexposure, by inhalation, should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema. In a victim of overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophogeal perforation. This material is an acid, but the use of alkaline substances to neutralize it is contraindicated.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirts and long pants, waterproof gloves, shoes plus socks and protective eyewear.

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.

Discard clothing and other absorbed materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them. 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.

# **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 body thoroughly and put on clean clothing.

#### **ENVIRONMENTAL HAZARDS**

Avoid spray drift to nearby crops as this product may cause temporary modifications in plant growth. Do not contaminate water used for irrigation or domestic purposes.

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 exceed the rate of PREPTM per acre per year recommended on this label.

## DIRECTIONS FOR USE

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

Read entire label before using this product.

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 regulations.

# 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 portaining to the statements on this label about personal protective equipment (PPE), notification to workers and restricted-entry intervals. 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, waterproof gloves, shoes plus socks and protective eyewear.

Notify workers of the application by warning them orally and posting warning signs at entrances to treated areas.

#### **GENERAL INFORMATION**

A foliar spray of PREPTM 4 Plant Regulator will accelerate opening of mature unopened cotton bolls and enhance defoliation which can result in earlier harvest with an increased recoverable yield. PREPTM 4 Plant Regulator treatment allows increased efficiency from a once-over harvest.

Some premature drop of small, immature bolls may be associated with treatment. Do not apply before sufficient, rnature, unopened bolls have developed to produce the desired yield of cotton.

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.

For best results, thorough and uniform spray coverage is required. It is essential that the bolls are contacted by the spray to obtain optimum boll opening. Observe treated fields closely. Harzest at optimum boll opening and defoliation, generally 14 to 21 days after treatment. Sustained cold weather with average day and night temperatures of 65°F or lower after treatment with PREP<sup>TM</sup> 4 Plant Regulator will delay the boll opening response.

DO NOT APPLY PREP™ 4 PLANT REGULATOR IF RAIN IS EXPECTED WITHIN 6 TO 8 HOURS. Rainfall within 6 to 8 hours of application may reduce product performance.

Certified cotton seed growers should observe boll and seed maturity before treatment with PREP™ 4 Plant Regulator. Bolls not completely mature might open with treatment of PREP™ 4 Plant Regulator giving lower quality seed.

Spray deposits of PREP<sup>TM</sup> 4 Plant Regulator, when left on aircraft acrylic plastic type windshields for longer than 1 hour, may react with this material, forming an opaque film or spots on the surface which cannot be removed by washing with water or any other cleaner. Rinse windshields with water immediately after each tankload of PREP<sup>TM</sup> 4 Plant Regulator has been applied. Thoroughly rinse the aircraft with clean water after each day PREP<sup>TM</sup> 4 Plant Regulator is applied.

PREP™ 4 Plant Regulator may also affect certain paints, and if accidental deposits on painted objects such as cars, trucks, agricultural equipment, etc. occurs, these objects should be rinsed with water as soon as possible (within 1 hour) to prevent permanent staining of the painted surface.

#### SPRAY PREPARATION

Add 1/2 to 3/4 of the required amount of water to the spray tank. Start agitation. Add the required amount of PREP™ 4 Plant Regulator, and the remaining amount of water. Prepare only as much spray solution as can be used on the day of mixing. Do not allow spray solution to stand overnight.

Do not spill the concentrated product on spray equipment, or any airplane parts. ANY SPILLS SHOULD BE RINSED IMMEDIATELY WITH PLENTY OF WATER.

Use of a nurse tank is highly recommended for avoiding possible spills of concentrated formulation on spray equipment or any airplane parts.

#### **EQUIPMENT CLEANING**

Because of the acidic nature of this product, prolonged exposure to spray deposit will damage acrylic plastics, certain paints, and metals.

Rinse thoroughly with a detergent and water all exposed acrylic plastic-type materials (e.g., aircraft windshields), and painted surfaces within an hour after exposure to spray deposits. At the end of each day, rinse thoroughly with a detergent and water all the metal parts of the aircraft and the associated spray equipment exposed to the spray deposits.

#### **BOLL OPENING**

#### Rates For Boll Opening

CONDITIONS EXPECTED 5-7 DAYS AFTER	DAYS AFTER PREP™ 4 OF PREP™ 4		SPRAY VO GAL./A		
TREATMENT		GROUND	AIR		
Hot and dry 80°F or higher	1.0 (1.0 lb a.i.)	4 Acres	15 to 50	2 to 5*	
Dry with temperature 75°F to 80°F	1.5 (1.5 lb a.i.)	2.5 Acres	15 to 50	2 to 5*	
Cool but higher than 65°F	2.0 (2.0 lb a.i.)	2 Acres	15 to 50	2 to 5*	
Rank cotton	2.0 (2.0 lb a.i.)	2 Acres	25 to 50	5	

<sup>\*</sup>NOTE: For California and Arizona use a volume of no less than 5 gallons per acre for aerial applications

# **Time of Application (Boll Opening)**

Apply when there are sufficient mature unopened bolls to produce the desired yield, but no later than when 60% of the bolls are opened (see General Information section on how to test for boll maturity). Do not tank mix PREP™ 4 Plant Regulator with a desiccant if the cotton is to be spindle harvested.

#### PRECONDITIONING FOR DEFOLIATION

#### Rates For Preconditioning For Defcliation

CONDITIONS EXPECTED 5-7 DAYS AFTER	PREP™ 4 QUARTS/ACRE	ONE GALLON OF PREP™ 4 TREATS	SPRAY VOLUME GAL./ACRE	
TREATMENT			GROUND	AIR
Hot and dry 80°F or higher	0.5 (0.5 lb a.i.)	8 Acres	15 to 50	2 to 5*
Cool but higher than 65° and also for rank cotton	1.0 (1.0 lb a.i.)	4 Acres	15 to 50	2 to 5*

<sup>\*</sup>NOTE: For California and Arizona use a volume of no less than 5 gallons per acre for aerial applications.

#### Time of Application (Preconditioning)

Apply PREPTM 4 to 7 days prior to application of defoliant or tank mixed with the defoliant (see section on Compatibility). Do not tank mix PREPTM 4 with desiccants unless plant desiccation is required.

# Pre-treatment With Defoliants Prior to PREPTM 4 Plant Regulator Treatment

If the cotton is overly rank or laying down in the middles and good spray coverage of the bolls with PREP™ 4 Plant Regulator is difficult, a pretreatment with defoliants will be useful to improve boll coverage with PREP™ 4 Plant Regulator. Use dosage rates of PREP™ 4 Plant Regulator recommended for boll opening. Read and observe all appropriate label use directions and precautions for the defoliant used.

Do not use a defoliant before there are sufficient mature unopened bolls to produce the desired yield (see General Information section on how th test for Boll Maturity).

### COMPATIBILITY

PREP™ 4 Plant Regulator is compatible with DEF, FOLEX, DROPP, HARVADE, METHYL PARATHION, GUTHION AND MALATHION, and may be applied in sequence or as a tank mixture (DO NOT TANK MIX WITH DEFOLIANTS OR DESICCANTS IN CALIFORNIA AND ARIZONA). In some cases slight reduction in boll opening response has been observed when tank mixes with defoliants were used.

Good agitation in the spray tank is essential and a tank mixture should not be allowed to stand without agitation for more than 5 to 10 minutes. Read and observe all appropriate label use directions and precautions for the defoliants and insecticides used.

PRECAUTION: DO NOT TANK MIX PREP™ 4 PLANT REGULATOR WITH DEFOLIANTS CONTAINING SODIUM CHLORATE BECAUSE THIS RESULTS IN THE FORMATION OF HYPOCHLOROUS ACIDS WHICH UPON HEATING EMIT TOXIC CHLORINE FUMES.

WHEN TO HARVEST: Do not harvest cotton sooner than 7 days after a treatment with PREP™ 4 Plant Regulator. Observe the treated crop and harvest when optimum boll opening has been reached. Too early harvest might reduce the full advantage of the treatment and too late a harvest may result in reduced quality and loss of lint which will drop from the plant.

#### **USE PRECAUTIONS**

Avoid spray drift to nearby crops as this product will cause modifications in plant growth. Plant injury or reduced yields will result.

Do not plant another crop within 30 days after treatment.

Mix only the amount of spray you expect to use each day. Do not allow mixed solution to stand overnight.

#### STORAGE AND DISPOSAL

#### STORAGE

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

#### PESTICIDE DISPOSAL

Pesticide 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

Triple rinse (or equivalent) the empty containers. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or if allowed by state and local authorities, by burning. If container is burned, stay out of smoke.

#### 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, warning 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 of residues on food crops and upon reports of field experience. 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.

Rhône-Poulenc Ag Company
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
PREP is a trademark of RHONE-POULENC.
PREP™ 4 Plant Regulator for Cotton (MASTER) Notification 4/14/94.