

JUN 20 1992

Mr. Warren A. Davis  
Rhone-Poulenc Ag Company  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, NC 27709

Dear Mr. Davis:

Subject: Revised Labeling  
PREP Ethephon Cotton Boll Opener  
EPA Registration No. 264-418  
Your Submission Dated June 30, 1992

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- Modify the Environmental Hazards Statement to include the following statement:

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,



Cynthia Giles-Parker  
Product Manger (22)  
Fungicide Herbicide Branch  
Registration Division (H7505C)

Enclosure

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# PREP™ BRAND ETHEPHON COTTON BOLL OPENER

**For Commercial Use Or Agricultural Use Only. Not For Residential Use**

**ACTIVE INGREDIENT:** Ethephon (2-Chloroethyl) phosphonic acid\* .....55.4%

**INERT INGREDIENTS:** .....44.6%

\*This product contains 6 pounds ethephon per gallon.

EPA Reg. No. 264-418

EPA Est. No. 264-PA-01

## KEEP OUT OF REACH OF CHILDREN DANGER PELIGRO

**PRECAUCION AL USUARIO:** Si usted no lee ingles, no use este producto hasta que la informacion en la etiqueta le haya sido explicado ampliamente.

**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 gentle stream of water for at least 15 minutes. Get medical attention, preferably an ophthalmologist.

**IF ON SKIN:** Immediately wash skin with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing separately before reuse.

**IF SWALLOWED:** Do not induce vomiting. 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.

### PRECAUTIONARY STATEMENTS

#### DANGER

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CORROSIVE.** Causes eye and skin damage. May be fatal if absorbed through skin. Harmful if swallowed or inhaled. Avoid breathing spray mist. Do not get in eyes, on skin or on clothing. Wear full length trousers, long sleeved shirt, protective gloves, and goggles or face shield when handling. Change to clean work clothes daily. Wash thoroughly with soap and water after handling and before eating, or smoking. Remove and wash contaminated clothing before reuse. Keep away from domestic animals.

#### NOTE TO PHYSICIAN

There is no specific antidote. All treatment 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 use of alkaliine substances to neutralize it is contraindicated.

#### 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 contaminate water used for irrigation or domestic purposes.

#### USE PRECAUTIONS

Do not apply PREP™ brand Ethephon Cotton Boll Opener through any type of irrigation system.

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.

**BEST AVAILABLE COPY**

## 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.

### REENTRY STATEMENT

Mixers, loaders and applicators must wear a full face shield, long trousers, long sleeved shirt, gloves and boots to avoid as much skin and eye contact as possible.

Do not enter treated fields within 24 hours after application unless protective clothing is worn.

### STORAGE AND DISPOSAL

#### STORAGE

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

If container is broken or contents have spilled, follow all precautions indicated above and clean up immediately. Before cleaning up, put on full length trousers, long sleeved shirt, protective gloves, and goggles or face shield. Soak up spill with absorbent media such as sand, earth or other suitable material and dispose of waste at an approved waste disposal facility.

#### 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.

### GENERAL INFORMATION

A foliar spray of PREP™ brand Ethephon Cotton Boll Opener will accelerate opening of mature unopened cotton bolls and enhance defoliation which can result in earlier harvest with an increased recoverable yield. PREP™ brand Ethephon Cotton Boll Opener 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, mature, 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. Harvest at optimum boll opening and defoliation, generally 14 to 21 days after treatment. Sustained cool weather with average day and night temperatures of 65°F or lower after treatment with PREP™ brand Ethephon Cotton Boll Opener will delay the boll opening response.

Do not apply PREP™ brand Ethephon Cotton Boll Opener 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™ brand Ethephon Cotton Boll Opener. Bolls not completely mature might open with treatment of PREP™ brand Ethephon Cotton Boll Opener giving lower quality seed.

Spray deposits of PREP™ brand Ethephon Cotton Boll Opener, 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™ brand Ethephon Cotton Boll Opener has been applied. Thoroughly rinse the aircraft with clean water after each day PREP™ brand Ethephon Cotton Boll Opener is applied.

PREP™ brand Ethephon Cotton Boll Opener 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™ brand Ethephon Cotton Boll Opener, 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 to remove 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.

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## PRETREATMENT WITH DEFOLIANTS PRIOR TO PREP™ PLANT REGULATOR

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

Do not exceed a maximum of 2.0 lb ai/A for the combined use as a preconditioning treatment for defoliation and cotton boll opening.

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

### BOLL OPENING

Conditions expected 5-7 days after treatment	Rate			Spray Volume (Gals/A)		Application Timing
	Pints/A	LBS A.I.	1 Gallon Treats	Ground	Air	
Hot and dry 80° F or higher	1-1/3	1.0	6 Acres	15-50	2-5 <sup>2</sup>	Apply when the number of mature unopened bolls is sufficient to produce the desired yield.
Dry and 75 to 80° F	2	1.5	4 Acres			
Cool but higher than 65° F	2-2/3	2.0	3 Acres			
Rank cotton	2-2/3	2.0	3 Acres	25-50	5 <sup>4</sup>	

#### RESTRICTIONS: Boll Opening

- In California and Arizona use a volume of no less than 5 gallons per acre for aerial applications.

### PRECONDITIONING FOR DEFOLIATION

Conditions expected 5-7 days after treatment	Rate			Spray Volume (Gals/A)		Application Timing
	Pints/A	LBS A.I.	1 Gallon Treats	Ground	Air	
Hot and dry 80° F or higher	2/3	0.5	12 Acres	15-50	2-5 <sup>4</sup>	Apply 4 to 7 days prior defoliant application or tank mix with the defoliant application (see Compatibility section). Do not tank mix with desiccants unless desiccation is required.
Cool but higher than 65° F	1-1/3	1.0	6 Acres			
Rank cotton	1-1/3	1.0	6 Acres			

#### RESTRICTIONS: Preconditioning for Defoliation

- In California and Arizona use a volume of no less than 5 gallons per acre for aerial applications.
- Do not exceed a maximum of 2 lb ai/A for the combined use as a preconditioning treatment for defoliation and cotton boll opening.
- Do not use a defoliant before there are sufficient mature unopened bolls to produce the desired yield (see General Information).

#### COMPATIBILITY

PREP™ brand Ethephon Cotton Boll Opener is compatible with DEF<sup>1</sup>, FOLEX<sup>®</sup>, DROPP<sup>2</sup>, HARVADE<sup>3</sup>, METHYL PARATHION, GUTHION<sup>1</sup> AND MALATHION<sup>4</sup>, and may be applied in sequence or as a tank mixture (DO NOT TANK MIX WITH DESICCANTS IF COTTON IS TO BE SPINDLE HARVESTED). 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™ brand Ethephon Cotton Boll Opener 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™ brand Ethephon Cotton Boll Opener.

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.

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### 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.

#### NOTICE TO BUYER

Purchase of this product does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

The use of this product for a variety of plant growth regulation uses is protected by various 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.

<sup>1</sup> DEF and Guthion are registered trademarks of Bayer AG, Germany.

<sup>2</sup> Dropp is a registered trademark of NOR-AM Chemical Company.

<sup>3</sup> Harvade is a registered trademark of Uniroyal Company.

<sup>4</sup> Malathion is a trademark of American Cyanamid Company.

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:**

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

264-418

Rhône-Poulenc Ag Company  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709

PREP™ is a trademark of Rhône-Poulenc.

Folex® is a registered trademark of Rhône-Poulenc.

PREP™ brand Ethephon Cotton Boll Opener (Pending) Submitted \_\_/\_\_/91.