

Cotton Harvest Aid

ACTIVE INGREDIENTS

Ethephon * [(2-chloroethyl)phosphonic acid]	51.8%
Cyclanilide** [1-(2,4-dichlorophenylaminocarbonyl)-cyclopropane	
carboxylic acid]	3.2%
OTHER INGREDIENTS	45.0%
TOTAL:	. 100.0%

- * This product contains 6.0 pounds ethephon per gallon
- ** This product contains 0.375 pounds cyclanilide per gallon

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.)

SEE LABEL BOOKLET FOR PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only. Call (877) 325-1840

EPA Reg. No. 228-727

FIRST AID				
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 confline rinsing eye. Call a poison control center or doctor for treatment advice.			
IF	Call a poison control center or doctor immediately for treatment advice.			

SWALLOWED

- Call a poison control center or doctor immediately for treatment advice
 Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
 Do not give anything to an unconscious person.
- 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.
- IF INHALED
- 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.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact (877) 325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

Treat symptomatically. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. No specific antidote is available. Probable mucosal damage may contraindicate the use of gastric layage.

Manufactured For Nufarm Americas Inc. 11901 S. Austin Avenue Alsip, IL 60803





Net Contents 2.5 Gal. (9.46 L)

Nonrefillable Container

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if inhaled or absorbed through the skin. Avoid contact with skin. Causes skin irritation. Do not get in eyes, on skin, or clothing. Avoid breathing vapor or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socksProtective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

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.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- · Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash thoroughly with soap and water after handling.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly
 and change into 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 washwater or rinsate. Do not contaminate water used for irrigation or domestic purposes. This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

NON-TARGET ORGANISM ADVISORY STATEMENT: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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 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. The REI is 72 hours in areas where average rainfall is less than 25 inches per year.

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, socks and chemical resistant footwear, protective evewear, and waterproof gloves.

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

PRODUCT INFORMATION

Use this product on cotton to accelerate opening of mature cotton bolls, promote defoliation of both mature and juvenile foliage, and reduce terminal regrowth. This product promotes earlier harvest and enhances the potential for high quality, high yield, once-over harvest. Rainfall, stress, temperature fluctuations, residual nitrogen, and yield potential can affect defoliation and/or regrowth.

MIXING INSTRUCTIONS

Prepare only the amount of spray solution required for immediate use. Do not allow the spray mixture to stand overnight or for prolonged periods. Storage and use of previous day's spray mixture may result in equipment corrosion and reduced activity.

Take precautions to avoid accidental spillage of the product on spray equipment or any airplane parts. THIS PRODUCT IS CORROSIVE. RINSE ANY SPILLS IMMEDIATELY WITH PLENTY OF WATER. Use of a nurse tank is highly recommended for avoiding possible spills of concentrated formulation on spray equipment.

Spray Solution Preparation

- Add 1/2 to 3/4 of the required amount of water to a spray tank and begin agitation.
 Add the required amount of this product and continue agitation through the mixing operation.
- Add the remaining amount of water.
- Maintain agitation of the spray solution during application.

TANK MIXTURES

This product may be applied as a tank mix with other harvest aid and pesticide formulations. Certain conditions such as rank growth, weed or insect infestations, drought, unutilized nitrogen, low temperature, high moisture, and heavy juvenile growth may require tank mixing or sequential applications with other products to obtain satisfactory defoliation and terminal regrowth suppression. Tank mix with other products registered for use on cotton such as Folex® 6 EC, FreeFall™ SC Cotton Defoliant, CutOut™ Cotton Defoliant, Roundup®, and Methyl Parathion 4 EC or 4 lb. When using this product in a tank mix, observe the most restrictive of the label limitations and precautions of the tank mix partners.

Maintain constant agitation throughout mixing and spraying operations. Limit any period without agitation to no more than 5 to 10 minutes. In some cases, slight reduction in boll opening response has been observed when tank mixes with phosphate defoliants were used.

Apply tank mixtures of this product with FreeFall SC on picker cotton and CutOut on stripper cotton to enhance regrowth suppression and removal of juvenile foliage.

Under certain conditions such as high temperatures or low soil moisture, tank mixtures with products such as Folex 6 EC, FreeFall SC, CutOut, and Methyl Parathion may result in leaf stick or leaf burn due to increased desiccation activity. To minimize leaf stick and leaf burn occurrence under these conditions, it is important to follow local recommendations and use the lower labeled rate of the tank mix partner product(s).

For cotton that will be spindle harvested, do not tank mix this product with a desiccant.

Notes:

UNDER CERTAIN CONDITIONS, TANK MIXTURES OF THIS PRODUCT WITH DESICCANTS CONTAINING SODIUM CHLORATE MAY RESULT IN THE FORMATION OF HYPOCHLOROUS ACID WHICH ON HEATING WILL EMIT TOXIC CHLORIDE FUMES.

DO NOT MIX THIS PRODUCT WITH AMMONIUM THIOSULFATE. SUCH TANK MIXTURES MAY RESULT IN FORMATION OF TOXIC FUMES.

Adjuvants:

This product and tank mixtures containing this product may be mixed with adjuvants. Add this product to the tank prior to the addition of an adjuvant. Consult the adjuvant label for use directions and rates.

EQUIPMENT CLEANING

This product is very acidic and can damage acrylic plastics, certain paints, and metals after prolonged exposure. Therefore, ensure that any exposed acrylic plastic-type materials (e.g., aircraft windshields) and painted surfaces are washed thoroughly with detergent and water within one hour of exposure to the spray droplets. When the application is completed, all metal parts of the aircraft and other spray equipment which were exposed to the spray solution should be washed thoroughly with detergent and water.

SPRAY DRIFT MANAGEMENT

AERIAL APPLICATIONS

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a fine to medium or coarser droplet size (ASABE S572.I).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- · Do not apply during temperature inversions.

GROUND BOOM APPLICATIONS

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a fine to medium or coarser droplet size (ASABE S572.I).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR A VOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size - Aircraft

- Adjust Nozzles Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage. Nozzle Orientation Orienting nozzles so
 that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice.
 Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM HEIGHT - Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine' drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns and how they affect spray drift. Every applicator should be familiar with local wind patterns and how they affect spray drift.

USE INFORMATION COTTON

Application Rate*				
Pints Product per Acre	Gallons Water per Acre	Expected Conditions	Application instructions	
1 1/3	3 Minimum (air) 10 Minimum (ground)	Hot, dry over 80° F	For Normal Conditions: The cotton crop must be in cut-out condition for this product to provide the expected boll opening, defoliation, and terminal regrowth suppression.	
2		Dry 75 to 80° F	Apply by air or ground equipment. For aerial applications, optimal gallonage is 5 GPA and applied in a way to minimize drift.	
2 2/3		Cool, but over 65° F or Rank cotton	For ground applications, optimal gallonage is between 15 - 25 GPA using a spray boom with 3 hollow cone nozzles per row and a minimum spray pressure of 40 psi. For either air or ground applications, best performance is	
			obtained when selecting spray equipment and spray volumes which ensure uniform coverage of foliage and bolls.	
1 1/3 to 2	3 Minimum (air) 10 Minimum (ground)	When the cotton crop has been under stress conditions such as hot weather, drought, unutilized nitrogen, weed or insect infestations, low temperature, high moisture, heavy juvenile growth or rank cotton, defoliation and terminal regrowth suppression may be enhanced by tank mixing with other products.	Tank Mixture Options for Unusual Conditions: Use this product with low rates of FreeFall SC Cotton Defoliant (warm weather) or with low rates of Folex 6 EC (warm or cool weather) on picker cotton. In addition to the above, CutOut Cotton Defoliant may be used on stripper cotton.	

^{*}Maximum single application rate of 2.0 lb ethephon a.i. and 0.125 lb cyclanilide a.i./Acre

WHEN TO APPLY

Apply this product when the cotton crop has cut-out and there are sufficient mature unopened bolls present (40 to 60%) to produce the desired yield. This state of growth may be estimated when the crop has reached 2100 - 2400 DD 60's for the year.

Two additional methods should also be used to estimate the proper crop maturity for application of this product:

Sharp Knife Technique - Apply when the number of mature unopened bolls is sufficient to produce the desired crop and bolls have become very hard, cannot be sliced easily by a sharp knife, have seed coats that are tan in color, and the seed kernel is completely filled inside the cavity. At this stage, no gelatinous material is present inside the boll or seed.

Nodes above Cracked Boll - The crop is ready to treat when the top-most, first-position harvestable boll is 4 nodes above the uppermost, first-position cracked boll. Delaying treatment past this date is not likely to result in additional recoverable bolls at harvest.

Note: Do not apply this product if rain is expected within 6 hours. Rainfall within 6 hours of application may reduce product performance.

USE RESTRICTIONS AND LIMITATIONS

- Do not harvest cotton sooner than 7 days after treatment.
- Do not apply this product through any kind of irrigation equipment.
- Do not apply more than 2.0 lb ethephon active ingredient per acre per year through combined or repeated uses of any ethephon products.
- Do not apply more than 0.125 lb cyclanilide active ingredient per acre per year.

Rotational Crop Restrictions

The following crops may be planted at the specified interval following application of this product.

State	Crop	Plantback Interval
All states except AZ and CA	Small grains Leafy Vegetables	30 days
	All other food crops	4 months
AZ and CA	All food crops	30 days

Small grains planted earlier than 1 month or intercropped within the cotton crop to which this product will be applied may only be used as cover crops and may not be harvested for food or feed.

Note: This product may cause yellowing and growth inhibition of treated small grains.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store between 0° to 50°C (32° to 122°F) in an area that is away from ignition sources. Avoid freezing. If freezing occurs, thaw and remix before using. Avoid contact with metals due to the corrosive properties of the formulation. 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 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 quidance.

CONTAINER HANDLING:

NOTE: This product is available in multiple containers. Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type/size.

Nonrefillable Containers 5 Gallons or Less

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic containers are also disposable by incineration, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.
Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.
Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure-rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER AND (3) MANUFACTURER AND SELLER AND AND SUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY EXPRESENTATION OR WARRANTY OR AGREEMENT BLATING IN ANY WAY TO THESS GOODS.

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If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations of liability, do not use the product and return it unopened to the Seller, and the purchase price will be refunded.

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