

68891-7

8/11/2005

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Tim McPherson  
Griffin L.L.C.  
P.O. Box 30  
Newark, DE 19714-0030

AUG 11 2005


Subject: Entek Corporation / ETK-2201  
EPA Registration No. 68891-7  
Amended Labeling  
Your Application Dated August 9, 2005

Dear Mr. McPherson:

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable.

A copy of the stamped label is enclosed for you records. Two copies of the final printed label must be submitted prior to releasing the product for shipment.

Sincerely yours,

  
Tony Kish  
Acting Product Manger 22  
Fungicide Branch  
Registration Division (H7505C)

Enclosure

# ETK-2201

## cotton harvest aid/defoliant

<i>Active Ingredients *</i>	<i>By Weight</i>
1-Aminomethanamide dihydrogen , tetraoxosulfate.(Monocarbamide dihydrogen sulfate)	58.6%
Ethephon (2-Chloroethylphosphonic acid)	18.3%
<b>Inert Ingredients</b>	23.1%
<b>TOTAL</b>	100.0%

\*This Product Contains 2.28 Pounds of Ethephon Per Gallon  
Density in Pound Per Gallon @ 68°F ... 12.45

EPA Reg. No. 68891-7

**ACCEPTED**

AUG 11 2005

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 68891-7

### 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.)

### 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 continue rinsing eye. 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.

**IF 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**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.

**NOTE TO PHYSICIAN:** There is no specific antidote. Treat symptomatically. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Acid ingestion may cause gastroesophageal perforation. Perforation may occur within 72 hours, but along with abscess formation, may occur weeks later. Due to the corrosive property of this material, emesis is contraindicated. Probable mucosal damage may contraindicate the use of gastric lavage. The use of alkaline substances to neutralize the acid is contraindicated. Victims of severe overexposure by inhalation should be kept under medical observation up to 72 hours for delayed onset of pulmonary edema.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **For medical emergencies involving this product, call toll free 1-800-441-3637.** See Label for Additional Precautions and Directions for Use.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

#### PERSONAL PROTECTIVE EQUIPMENT

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistant category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- Protective 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 instruction for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROL STATEMENTS:** 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 thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS**

This product may be harmful to wildlife directly sprayed. Do not apply directly to water, 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 in any manner not specified on the label.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not allow ETK-2201 to be heated above 176°F, as the quality of the product may deteriorate. If ETK-2201 is heated above 230°F, vigorous decomposition may occur. Do not weld equipment containing ETK-2201.

**CLOTHING:** ETK-2201 can attack cotton, nylon and leather clothing. If ETK-2201 contacts clothing of this type, flush with plenty of water to minimize damage.

**DO NOT MIX** with materials containing chlorates as this could result in the formation of hypochlorous acids which on heating will emit toxic chlorine fumes.

**DO NOT APPLY** this product through any type of irrigation system.

**DO NOT PLANT** another crop within 30 days after treatment.

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

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

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Follow all applicable directions, restrictions and precautions on the EPA-registered label. 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. This label must be in the possession of the user at the time of application.

**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 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 in this labeling about personal protective equipment (PPE) and restricted-entry interval. 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 increases to 72 hours in outdoor areas where average rainfall is less than 25 inches a 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear

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

**COTTON HARVEST AID**

**Application Recommendations  
GENERAL INFORMATION**

ETK-2201, or a tank mix of ETK-2201 and an approved partner, when applied as a foliar spray to cotton, provides fast, effective defoliation of cotton plants and increases the speed and efficacy of opening of mature bolls. ETK-2201 may be applied alone to cotton that is very physiologically mature; however, under most conditions, most consistent defoliation and regrowth inhibition is achieved with tankmixes of ETK-2201 and an approved defoliant. Where cotton is lodged or extremely rank, it may be desirable to apply a defoliant prior to application of ETK-2201 for boll opening. Typically, satisfactory defoliation is achieved in 7 to 10 days. Under adverse conditions, such as low temperatures and/or toughened foliage, up to 14 days may be required for satisfactory defoliation. ETK-2201 also provides limited control of cotton regrowth.

**APPLICATION TIMING AND RATE**

Apply ETK-2201 when sufficient, mature, unopened bolls have developed to produce the desired cotton yield (approximately 65% opened bolls in most cases). Consult University recommendations in your area for testing of boll maturity. Treatment with ETK-2201 before the appropriate number of bolls have reached maturity may result in reduction of yield and lint quality.

**ETK-2201 ALONE**

Apply 3.0 to 3.5 quarts of ETK-2201 per acre. For effective defoliation and boll opening of very mature cotton under optimum conditions, i.e., relatively dry with average temperatures of 80°F and above, apply 3.0 quarts of ETK-2201 per acre. Under less than optimum conditions and with rank cotton, apply 3.5 quarts of ETK-2201 per acre.

**ETK-2201 TANKMIX**

Under optimum conditions, i.e., relatively dry with average temperatures of 80°F and above, ETK-2201 at 1.5 to 2 quarts per acre, in tankmixes with an approved defoliant, is normally adequate for defoliation and boll opening (see Table below). Under less than optimum conditions and with rank cotton, higher rates of application in tankmixes with an approved defoliant are required.

ETK-2201 may be applied at 0.4 quarts per acre in tankmixes with Def 6/Folex or Dropp 50WP/FreeFall 50 WP for defoliation enhancement. Refer to the Def 6/Folex and Dropp 50WP/FreeFall 50 WP labels for rates of application. Application of ETK-2201 at 0.4 quarts per acre in tankmixes for defoliation enhancement is not sufficient to provide substantial boll opening.

For most consistent defoliation and regrowth inhibition, ETK-2201 should be applied in a tankmix with an approved defoliant. Below is a partial listing of approved defoliants and rates of application:

Defoliant	Defoliant Rates for ETK-2201 Tankmixes
Def 6/Folex	4.0-12 fl oz/A *
Dropp 50WP/FreeFall 50 WP	0.8-2.0 oz/A
Ginstar	3.0-8.0 fl oz/A
Harvade 5F	4.0-6.4 fl oz/A

\*Under extreme cool, wet conditions, the rate of Def 6/Folex may be increased to 24 fl oz.

ETK-2201 may also be applied in tankmixes with any approved desiccants/herbicides, including Cyclone, Starfire and Roundup (and other labeled glyphosate products).

Refer to product labels for rates and additional product information. Tankmixes must be made in accordance with the more restrictive of label limitations and precautions. No label dosage rate should be exceeded. ETK-2201 cannot be mixed with any product containing a label prohibition against such mixing.

**ETK-2201 ALONE AND ETK-2201 TANKMIX**

To ensure optimum activity, thorough and uniform spray coverage is required. It is essential that cotton leaves and unopened bolls are contacted in order to achieve satisfactory results. Apply as a dilute spray in 10 to 30 gallons of water per acre by ground application or 3 to 10 gallons of water per acre by aerial application.

**USE LIMITATIONS**

Two applications of ETK-2201 are allowed per year, but do not exceed a maximum of 3.5 quarts of ETK-2201 per acre per year (equivalent to 2.0 pounds ethephon active ingredient per acre per year).

The maximum amount of ethephon active ingredient that can be applied to cotton per acre per year from all sources of ethephon is 2.0 pounds.

The use of adjuvants with ETK-2201 is required only where necessary for optimum performance of tankmix partners, e.g., Harvade, Roundup, D-PAK, Cyclone, and Starfire. To reduce potential for desiccation of cotton foliage in Harvade and Roundup tankmixes, minimum rates of adjuvants should be used. For other applications, use of adjuvants, other than the minimum rate of a non-ionic surfactant, is not advised as this may increase the risk of desiccation of cotton foliage.

Do not harvest cotton sooner than 7 days after treatment with ETK-2201.

**MIXING PROCEDURE**

Add 1/2 to 3/4 of the required amount of water to the spray tank and begin agitation. Add the required amount of ETK-2201 and then the remaining amount of water. If Dropp 50WP/FreeFall 50 WP is used in the mixture, it should be added to the spray tank first, followed by ETK-2201. Prepare only as much spray solution as can be used on the day of mixing. Do not allow the spray solution to stand overnight. Do not permit undiluted ETK-2201 to contact painted surfaces, spray equipment or any airplane parts. All spills should be rinsed immediately with plenty of water.

**EQUIPMENT CLEANING**

Rinsing is strongly recommended with ETK-2201. Prolonged exposure to spray deposit may damage acrylic plastics, certain paints and metals. Dilute residues are corrosive, so neutralization is an essential part of the cleanup. All interior surfaces should be rinsed with a neutralizing solution prior to being parked. The best neutralizing solution to use is baking soda. Add 1 pound neutralizer to the rinse water. Run the pump long enough to clear the lines and nozzles of ETK-2201 residue and rinse the exterior of the equipment. Areas used to rinse equipment should be rinsed well since ETK-2201 is corrosive to concrete.

**Spray Drift Management**

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

**AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**

**• Importance of Droplet Size**

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.**

• **Controlling Droplet Size - General Techniques**

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **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.

• **Controlling Droplet Size - Aircraft**

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** - The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.
- **Application Height** - Application more than 10 ft above the canopy increases the potential for spray drift.

• **Boom Height**

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

• **Wind**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID GUSTY OR WINDLESS CONDITIONS.**

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

• **Temperature and Humidity**

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

• **Temperature Inversions**

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning.

Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.

• **Shielded Sprayers**

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Material crystallizes below 32°F. Do not heat above 176°F.

Materials recommended for use with ETK-2201 include polyethylene, polypropylene, PVC, CPVC, fiberglass made with reinforced resins such as polyesters and epoxides, most rubbers and 316 stainless steel.

Do not expose mild steel, leather, nylon, or acid sensitive resins such as delrin and celcon to undiluted ETK-2201.

**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) all containers and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by procedures approved by state and local authorities.

**RETURNABLE - REFILLABLE CONTAINERS:** After use, return the container to the point of purchase or designated locations. This container must only be refilled with ETK-2201 Cotton Harvest Aid. **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.

FreeFall is a registered trademark of Griffin L.L.C.  
Cyclone and Starfire are registered trademarks of Syngenta.  
Def, Dropp and Ginstar are registered trademarks of Bayer.  
Folex is a registered trademark of AmVac Chemical Corporation.  
Harvade is a registered trademark of Uniroyal Chemical Company, Inc.  
Roundup is a registered trademark of Monsanto Technology LLC.

**GD - 016 020805**

**LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read This Limitation Of Warranty And Liability Before Buying Or Using This Product. If The Terms Are Not Acceptable, Return The Product At Once, Unopened, And The Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Entek. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. Entek does not agree to be an insurer of these risks. **WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.**

Entek warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

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Entek or its Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify Entek or a Entek Ag Retailer of any claims, whether based on contract, negligence, strict Liability, other tort or otherwise or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.