

Griffin®

CottonQuik®

COTTON HARVEST AID / DEFOLIANT

ACTIVE INGREDIENTS

1-Aminomethanamide dihydrogen tetraoxosulfate...(Monocarbamide dihydrogen sulfate).....	58.6%
Ethephon (2-Chloroethyl)phosphonic acid.....	18.3%
INERT INGREDIENTS	<u>23.1%</u>
TOTAL	100.0%

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

**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.)

STATEMENT OF PRACTICAL TREATMENT

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 ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor immediately 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 immediately for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for 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. Careful gastric lavage is required because of the possibility of esophageal perforation. The use of alkaline substances to neutralize the acid is contraindicated. Victims of severe overexposure by inhalation should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema.

For medical emergencies involving this product, call toll free 1-888-324-7598.

See Label for Additional Precautions and Directions for Use

DISTRIBUTED BY
GRIFFIN L.L.C.
VALDOSTA, GEORGIA 31601

Specimen Label

EPA REG. NO. 68891-7-1812

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)
DANGER – PELIGRO

Corrosive. Causes irreversible eye damage. Causes skin irritation. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Avoid breathing spray mist. Wear goggles or face shield. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing or loading

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 Controls 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 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.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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

CLOTHING: CottonQuik can attack cotton, nylon and leather clothing. If CottonQuik 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.

STORAGE AND DISPOSAL

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

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

Materials recommended for use with CottonQuik 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 CottonQuik.

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 CottonQuik 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.

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:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

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

COTTON HARVEST AID

Application Recommendations

GENERAL INFORMATION

CottonQuik, or a tank mix of CottonQuik 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. CottonQuik 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 CottonQuik and an approved defoliant. Where cotton is lodged or extremely rank, it may be desirable to apply a defoliant prior to application of CottonQuik 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. CottonQuik also provides limited control of cotton regrowth.

APPLICATION TIMING AND RATE

Apply CottonQuik 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 CottonQuik before the appropriate number of bolls have reached maturity may result in reduction of yield and lint quality.

COTTONQUIK ALONE

Apply 3.0 to 3.5 quarts of CottonQuik 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 CottonQuik per acre. Under less than optimum conditions and with rank cotton, apply 3.5 quarts of CottonQuik per acre.

COTTONQUIK TANKMIX

Under optimum conditions, i.e., relatively dry with average temperatures of 80°F and above, CottonQuik 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.

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

For most consistent defoliation and regrowth inhibition, CottonQuik 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 CottonQuik Tankmixes
Def 6/Folex	4.0-12 fl oz/A*
Dropp 50WP/FreeFall	0.8-2.0 oz/A
Ginistar®	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.

CottonQuik may also be applied in tankmixes with any approved dessicants/herbicides, including Boa®, Cyclone®, Starfire®, Glyphosate Original 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. CottonQuik cannot be mixed with any product containing a label prohibition against such mixing.

COTTONQUIK ALONE AND COTTONQUIK 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 CottonQuik are allowed per year, but do not exceed a maximum of 3.5 quarts of CottonQuik 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 CottonQuik is required only where necessary for optimum performance of tankmix partners, e.g., Harvade, Roundup, D-PAK, Boa, Cyclone, and Starfire. To reduce potential for dessication 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 dessication of cotton foliage.

Do not harvest cotton sooner than 7 days after treatment with CottonQuik.

MIXING PROCEDURE

Add ½ to ¾ of the required amount of water to the spray tank and begin agitation. Add the required amount of CottonQuik and then the remaining amount of water. If Dropp 50WP/FreeFall is used in the mixture, it should be added to the spray tank first, followed by CottonQuik. 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 CottonQuik 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 CottonQuik. 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 CottonQuik residue and rinse the exterior of the equipment. Areas used to rinse equipment should be rinsed well since CottonQuik is corrosive to concrete.

SPRAY DRIFT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

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

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backwards parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory below.

AERIAL DRIFT REDUCTION ADVISORY

The following aerial drift reduction advisory information must be contained in the product labeling.

(This section is advisory in nature and does not supercede the mandatory label requirements.)

INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. 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.)

CONTROLLING DROPLET SIZE

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- 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 LENGTH

For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should 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.).

WIND

Drift potential is lowest between wind speeds of 2 to 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. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures 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 of 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.

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with 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 GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or at GRIFFIN'S election, the replacement of this product. **GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

PATENTS AND PATENTS PENDING

The product contained herein is described in the following U.S. composition, manufacturing and/or method of use patents: 4397675, 4404116, 4445925, 4818269, 4966620, and 4994101. Other U.S. and foreign patents are pending.

A license is hereby granted to the purchaser under the above listed U.S. Patents only, and only for the use of the product contained herein, and only in accordance with the instructions on this label. No other license, express or implied, is granted, not for export.

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