



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 27 2006

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Peter J. Porpiglia, Ph.D.  
Vice President R&D  
K-I Chemical, U.S.A., Inc.  
11 Martine Avenue, Suite 970  
White Plains, NY 10606

Dear Dr. Porpiglia:

Subject: Appeal™ EC  
EPA Registration No. 63588-8  
EPA Pesticide Petition 7F4821  
Application and Your Letter Dated February 23, 2006,  
Request to Amend Registration by Adding Use in Cotton  
Defoliation

The proposed labeling amendment to the subject registration of Appeal™ EC has been reviewed and found acceptable under the Federal Insecticide, Fungicide and Rodenticide Act, FIFRA, as amended, provided that you:

1. On Page 2, Add to the 1<sup>st</sup> line of the Warranty Statements, to read: "To the extent allow by applicable Law K-I Chemical U.S.A., Inc warrants that ....."
2. On page 4, delete the descriptor "selective" in the 1<sup>st</sup> sentence of the "General Information" section.
3. Revise the "Conditions That Affect Leaf Drop", Rain "Appeal ED is rainfast 1 hour after application, to address the possibility that the spray has not dried within the 1 hour period after application.
4. On page 15, spell-out the word acre in the statement in the chart under "Maximum Amount Per Season".
5. On page 16, delete the "Compatibility Test" as it is a repeat of the one on page 6. If needed make reference to the one on page 6 of this label.
6. On page 18, revise the last sentence in the 1<sup>st</sup> paragraph to read: "When using Appeal™ EC in a tank mixture with other harvest aids, follow the label limitations and precautions of the tank mix partner."

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And delete from the chart "Note: To aid in desiccation, these products can also be tank mixed with Appeal™ EC, but these products can contribute to cotton leaf stick."; or describe the potential for leaf stick and how to prevent this effect.

7. Submit one (1) copy of the final printed labeling before you release this product for shipment under the subject labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA, section 6(e). Your release for shipment of this product under this labeling constitutes acceptance of these conditions.

A stamped copy of the proposed label is enclosed for your records.

Sincerely yours,

*Joanne I. Miller*

Joanne I. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7505P)

Enclosure

3 8 26

Appeal™ EC

Herbicide for postemergence control of velvetleaf and other broadleaf weeds in soybeans, field corn, sweet corn, and popcorn

Harvest Aid for defoliating cotton.

Active Ingredient:	
Fluthiacet-methyl (CAS No. 117337-19-6) .....	10.30%
<u>Other Ingredients:</u>	<u>89.70%</u>
Total:	100.00%

Appeal EC is an emulsifiable concentrate containing 0.91 lb. fluthiacet-methyl per gallon

**WARNING / AVISO**

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.)

**KEEP OUT OF REACH OF CHILDREN.**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 63588-8

EPA Est. 11773-IA-01

- ½ pint
- U.S. Standard Measure
- or
- 1 pint
- U.S. Standard Measure
- or
- 1 quart
- U.S. Standard Measure
- or
- 1 gallon
- U.S. Standard Measure

**ACCEPTED**  
**with COMMENTS**  
**In EPA Letter Dated:**  
 DEC 27 2006  
 Under the Federal Insecticide,  
 Fungicide, and Rodenticide Act  
 as amended, for the pesticide  
 registered under EPA Reg. No.

63588-8

## DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

**Important:** Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product. If terms are not acceptable, return the unopened product container at once.

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### CONDITIONS OF SALE AND WARRANTY

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The **Directions for Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, 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 K-I Chemical U.S.A., Inc. or the Seller. All such risks shall be assumed by the Buyer.

K-I Chemical U.S.A., Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **K-I Chemical U.S.A., Inc. makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall K-I Chemical U.S.A., Inc. or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** K-I Chemical U.S.A., Inc. and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of K-I Chemical U.S.A., Inc.

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**DIRECTIONS FOR USE**

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

**Note:** Appeal EC is NOT REGISTERED FOR USE in California or Arizona.

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 and restricted-entry interval.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.**

PPE required for early entry into 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
- chemical-resistant gloves such as barrier laminate, butyl rubber  $\geq 14$  mils, or viton  $\geq 14$  mils
- shoes plus socks

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, POOR COTTON DEFOLIATION, CROP INJURY, OR ILLEGAL RESIDUES.**

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\*\*\*\*\* FOR HERBICIDE USE IN CORN AND SOYBEANS \*\*\*\*\*

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**GENERAL INFORMATION**

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Appeal EC is a selective postemergence herbicide for control of velvetleaf and other broadleaf weeds in soybeans, field corn, sweet corn, and popcorn (includes field corn, sweet corn, and popcorn grown for seed). Appeal EC must be applied after emergence of the crop and broadleaf weeds. There is a wide application timing window for use in soybean and corn. For use in soybean the application window ranges from first trifoliolate to the full flowering stage. For use in corn, the application window ranges from the 2-leaf stage (2 visible collars) until the corn is 48 inches tall or prior to tasseling, whichever comes first. Refer to Table 2 for a list of the broadleaf weeds controlled.

Appeal EC will control velvetleaf up to 36 inches tall. Appeal EC will also control or partially control certain other annual broadleaf weeds. Partial control means significant activity but not always at a level generally considered acceptable for commercial weed control. When tank mixed, Appeal EC may enhance the performance of other herbicides in the control of certain broadleaf weeds (see Table 2). Appeal EC does not control grasses. Therefore, if grasses are present at the time of application, Appeal EC should be mixed with an appropriate postemergence herbicide registered for grass control.

The amount of Appeal EC to apply and the degree of weed control resulting from an Appeal EC application depend upon a variety of factors such as weeds present, stage of growth of the weeds, environmental conditions, and growing conditions. Weeds under stress because of lack of moisture, low soil fertility, mechanical or chemical injury, may not be controlled as well as actively growing weeds. Weed death or inhibition can be expected quickly – normally within 48 hours after application.

To be effective, Appeal EC must contact the weed foliage. Thorough coverage with the spray solution gives the most effective weed control. A large crop and/or weed canopy as well as a dense crop and/or weed canopy can prevent the spray from reaching smaller weeds resulting in reduced control of these smaller weeds.

Soybean and corn are tolerant of Appeal EC when applied according to label directions. Some bronzing, crinkling, or spotting of crop leaves may occur. Soybean and corn rapidly outgrow these effects and develop normally with no reduction in yield.

Cotton is very sensitive to Appeal EC. Do not allow spray to contact cotton unless the application is for cotton defoliation (see FOR USE IN COTTON DEFOLIATION below).

### **Grazing/Feeding and Harvesting Restrictions**

Do not graze or feed treated soybean forage or hay to livestock.

Do not harvest or feed corn grain or stover (fodder) until 90 days after the last application of Appeal EC Herbicide.

Do not harvest or feed field corn forage until 30 days after the last application of Appeal EC Herbicide.

Do not harvest or feed sweet corn forage or ears until 40 days after the last application of Appeal EC Herbicide.

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### **MIXING INSTRUCTIONS**

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#### **Spray Additives**

An adjuvant approved for use on growing crops is required with Appeal EC for maximum consistent performance.

#### **1. Adjuvants for Appeal EC Alone**

Use a spray adjuvant from one of these classes for optimum performance:

**Non-ionic surfactant (NIS)** – with a minimum of 80% of the constituents effective as spray adjuvant at the rate of 1 quart/100 gals. of spray volume (concentration of 0.25%)

**Crop Oil Concentrate (COC)** – petroleum or vegetable-based containing not less than 12% emulsifier at 1-2 pts./A. The concentration should not exceed 2.5% volume/volume. COC is recommended under conditions of dry soil and low relative humidity.

**Silicone-based surfactant** – at a rate of 1 qt./100 gals. or a spray volume concentration of 0.25% or as specified on the adjuvant label.

In addition to an adjuvant, urea ammonium nitrate (UAN) at 1-2 qts./A or spray grade ammonium sulfate (AMS) at 1.5-2.5 lbs./A may also be added to the spray solution. Do not use liquid fertilizer as the total carrier solution.

#### **2. Adjuvants for Appeal EC in Tank Mixtures with Other Herbicides**

When tank mixing with other herbicides, use the adjuvant recommended for use with the tank mix partner. Follow all restrictions and precautions on the tank mix partner's label.

## Compatibility Test

A jar test is recommended before mixing to ensure Appeal EC compatibility with tank mix partners and adjuvants. The following test assumes a spray volume of 25 gallons per acre. For other spray volumes, make appropriate changes in the ingredient rates.

1. Add 1.0 pt. of water to each of 2 one-quart jars with tight lids.

**Note:** Use the same source of water and the other components in the compatibility test that will actually be tank mixed and applied. It is important that all components are mixed at a temperature similar to the temperature of those used for the actual application.

2. To one of the jars, add  $\frac{1}{4}$  tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® ( $\frac{1}{4}$  tsp. is equivalent to 2 pt./100 gals. spray). Shake or stir gently to mix.
3. To **both** jars, add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. Finally, add the appropriate amount of any adjuvants that will be used. After **each** addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

**Dry Herbicides and Adjuvants:** For each pound to be applied per acre, add 1.4 tsp. to each jar.

**Liquid Herbicides and Adjuvants:** For each pint to be applied per acre, add 0.5 tsp. or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15-30 minutes and look for separation, large flakes, precipitates, gels, heavy oil film on the jar, or other signs of incompatibility. Determine if a compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility.
  - a. Slurry the dry pesticide(s) in water before addition, or
  - b. Add  $\frac{1}{2}$  the compatibility agent to the water and the other  $\frac{1}{2}$  to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.

After compatibility testing is complete, dispose of any pesticide wastes according to the **Storage and Disposal** section of this label.



### **How to Mix**

1. The spray equipment must be clean before using this product. If it is contaminated with other materials, mixing problems and/or clogging may occur or crop injury may occur.
2. Prepare no more spray mixture than is needed for the immediate application, and do not let the spray mixture stand in the spray tank overnight.
3. Maintain maximum agitation throughout the spraying operation.
4. Water-soluble packets must always be the first material put into the spray tank after water. Water-soluble packets must be completely dissolved and dispersed in clean water only before any other tank mix partners, including adjuvants, micronutrients, or other fertilizers are added to the spray solution. Boron, especially in the form of a micronutrient additive, such as Solubor®, etc., may prevent water-soluble packets from dissolving.
5. Flush the spray equipment thoroughly after each use and apply rinsate to a previously-treated area.

### **Mixing Appeal EC Alone**

1. Add  $\frac{1}{4}$ - $\frac{1}{2}$  of the required amount of **clean** water to the spray or mixing tank.
2. With the agitator running, add the required amount of Appeal EC to the spray tank. Continue agitation in the spray tank and allow product to fully and uniformly disperse.
3. Add the spray adjuvant and continue agitation while adding the rest of the water.
4. Maintain agitation until all of the mixture has been applied.

### **Mixing Appeal EC in Tank Mixtures with Other Herbicides**

Appeal EC is compatible with most commonly used herbicides, insecticides, fungicides, and spray adjuvants. BEFORE MIXING APPEAL EC WITH OTHER REGISTERED PRODUCTS FOR ANY USE ON THIS LABEL, READ THE LABEL OF THE TANK MIX PARTNER TO BE CERTAIN IT IS LABELED FOR THE USE ON THE PARTICULAR CROP AND THAT USE PATTERNS ARE COMPATIBLE WITH THOSE OF APPEAL EC. When using Appeal EC in a tank mixture with other pesticides, observe the most restrictive label limitations and precautions for the products being used.

Mixing Appeal EC with acifluorfen or lactofen-containing products (such as Blazer®, Galaxy®, Cobra®, or Storm®) can improve the control of velvetleaf by these products. However, these tank mixes will not control velvetleaf as well as Appeal EC applied alone.

### **Tank Mixing Steps**

1. Add  $\frac{1}{4}$  -  $\frac{1}{2}$  of the required amount of clean water to the spray or mixing tank.
2. With the agitator running, drop the required number of packets of any products packaged in water-soluble packets into the tank all at once. Continue agitation in the spray tank and allow the packets to completely dissolve and the contents of the packets to fully and uniformly disperse.
3. While maintaining agitation, continue filling the spray tank. When the tank is  $\frac{3}{4}$  full, add any dry formulation tank mix partners and allow them to completely and uniformly disperse.
4. Add the required amount of Appeal EC to the spray tank while maintaining agitation. After the product has completely and uniformly dispersed into the tank mix, add any other liquid tank mix partners and allow them to completely and uniformly disperse.
5. Add the proper amount of spray adjuvant and continue agitation while adding the remaining water.
6. Complete filling the tank with clean water and maintain sufficient agitation at all times to insure surface action until the mixture is uniform.
7. To avoid product degradation, apply the Appeal EC spray mixture within 48 hours of mixing, and do not leave the spray mixture in the tank without continuous agitation.
8. After use, thoroughly clean the sprayer according to this label (see Cleaning Spray Equipment) and any tank mix partner labels.

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## **APPLICATION PROCEDURES AND PRECAUTIONS**

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### **Chemigation**

Do not apply this product through any type of irrigation equipment.

### **Aerial Application**

Do not apply this product by air as a herbicide in corn and soybeans.

### Ground Application

Apply Appeal™ EC in a minimum of 15 gals. of water/A with 20-40 psi pressure at the nozzles. If a dense crop and/or weed canopy is present, use up to 40 gals. of water per acre and 50-70 psi pressure at the nozzles.

**Note: When using higher nozzle pressures, use extreme caution to avoid spray drift to nearby crops.**

Use a pump with enough capacity to maintain a rippling or rolling action in the spray tank. For a uniform spray mixture, agitation during mixing and application is required.

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### HOW MUCH TO APPLY

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**Table 1. Rates of Application of Appeal™ EC in Soybean, Field Corn, Sweet Corn, and Popcorn**

Tank Mixed with Another Labeled Broadleaf Herbicide		Applied Alone or with a Grass Control Herbicide*	
Touchdown® Roundup® Original, or Roundup® Ultra (for use in glyphosate tolerant crops)	Other postemergence broadleaf herbicides (see Table 3)	Standard Rate	Enhanced Rate for Improved Control of Difficult Weeds
0.4 fl. oz./A	0.5 fl. oz./A	0.6 fl. oz./A	0.9 fl. oz./A

\*See Table 2 for list of weeds controlled.

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### WHEN TO APPLY

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#### Weed Stage of Growth

Apply Appeal EC after weeds have emerged and are actively growing, but before the weeds have reached the maximum height listed in Table 2. Application after weeds have reached the listed maximum height for control could result in commercially unacceptable weed control.

Avoid applying Appeal EC if weeds cannot be evenly covered with the spray or when spray drift is possible. To reduce spray drift, do not apply if wind speed is 10 mph or greater. Avoid overlapping the spray pattern since this may increase chances for crop injury.

### **Soybean Stage of Growth**

Appeal EC may be applied to soybeans from the first trifoliolate through the full flowering stage of development. To avoid possible illegal residues, the last application should be made no later than 60 days before harvest. This product requires a pre-harvest interval (PHI) of 60 days.

### **Field Corn, Sweet Corn, and Popcorn Stages of Growth**

Appeal EC may be applied to corn from the 2-leaf stage (2 visible collars) to 48 inches tall, but before tasseling.

### **Cultivation**

Do not cultivate within 2 days before or 2 days after applying this product.

### **Application Precautions**

1. Do not apply more than 1.25 fl. oz./A of Appeal EC per cropping season.
2. Do not apply if crop is under severe stress due to drought, cold weather, hail, flooding, water-logged or compacted soil, disease, insect damage, nutrient deficiency (especially low nitrogen levels), or other causes.
3. Appeal EC can be applied in tank mixtures to weeds taller than the maximum heights listed in Table 2 provided the application follows all timing and rate precautions on the tank mix partner's label.
4. Application to weeds that are under severe stress due to drought or to weeds that are taller than the optimum heights listed in Table 2 may result in reduced weed control.
5. Do not irrigate within 4 hours of application of Appeal EC. Rainfall or irrigation may wash Appeal EC off of the weeds during this period and reduce performance.
6. Observe all precautions and limitations on the label of each product used in tank mixture with Appeal EC.

**WEEDS CONTROLLED / APPLICATION RATES**

**1. Appeal EC Alone**

At the rates and timings listed, Appeal EC controls the weeds listed in Table 2 when the product is applied alone after emergence of soybean, field corn, sweet corn, or popcorn, and weeds. Appeal EC only controls certain broadleaf weeds after they emerge and does not provide residual control of weeds that emerge later. Weeds larger than the size indicated in Table 2 may only be partially controlled.

**Table 2. Broadleaf Weeds – Application Rate for Appeal EC Applied Alone with an Adjuvant**

Weed Species	(0.6 fl. oz./A)		(0.9 fl. oz./A)	
	Leaf Stage*	Maximum Height (in.)	Leaf Stage*	Maximum Height (in.)
Anoda, spurred ( <i>Anoda cristata</i> )	2	2	3	4
Burcucumber ( <i>Sicyos angulatus</i> )	2	2	2	2
Jimsonweed ( <i>Datura stramonium</i> )	2**	2**	4	2
Nightshade, black ( <i>Solanum nigrum</i> )	2**	2**	2**	2**
Nightshade, eastern black ( <i>S.ptycanthum</i> )	2**	2**	2**	2**
Lambsquarters, common( <i>Chenopodium album</i> )	4**	2**	4-6	2
Pigweed, redroot ( <i>Amaranthus retroflexus</i> )	4**	2**	4-6	4
Pigweed, smooth ( <i>A. hybridus</i> )	2**	2**	2-4	4
Velvetleaf ( <i>Abutilon theophrasti</i> )	--	36	--	36
Waterhemp, common ( <i>Amaranthus rudius</i> )	--	--	2	2
Waterhemp, tall ( <i>A. tuberculatus</i> )	--	--	2	2

\*Count individual leaves except the cotyledons.

\*\*Partial control or suppression.

**2. Appeal EC in Tank Mixtures with Other Postemergence Herbicides to Improve Broadleaf Weed Control**

Appeal EC may be applied postemergence with Touchdown®, Roundup® Original or Roundup® Ultra or other postemergence broadleaf herbicides approved for use on soybeans. Tank mixing Appeal EC with other postemergence herbicides may increase the speed of activity and/or level of control of the weeds listed in Table 2. When mixed with any of the tank mix partners listed in Table 3, Appeal EC will control velvetleaf up to 36 inches tall.

Refer to Table 3 for the amount of Appeal EC to apply per acre and a list of tank mix partners. Follow all directions, restrictions and precautions on the EPA-approved label for each product in the tank mixture.

**Table 3. Appeal™ EC Tank Mix Partners – Broadleaf Control**

Amount of Appeal EC/Acre*	Tank Mix Partner	
0.5 fl. oz./A	<u>Soybean</u>	<u>Corn</u>
	Basagran® Blazer® Classic® Cobra® Concert® SP Flexstar® HL Galaxy® Manifest® Pinnacle® Pursuit® Raptor® Reflex® Reliance™ STS® SP Scepter® O.T.® Status® Storm®	2,4-D AAtrex® Accent® Banvel® Basagran® Basis™ Basis Gold® Beacon® Buctril® Clarity® Exceed® Headline® Hornet® Laddok® S-12 Lightning®
0.4 fl. oz./A	Roundup® Original Roundup® Ultra Touchdown®	

\*If a second application is needed, do not apply more than a total of 1.25 oz. of Appeal EC per acre per season.

**3. Appeal™ EC in Tank Mixtures for Grass Weed Control**

Appeal EC does **not** provide grass control, but it can be tank mixed with any postemergence grass herbicide registered for control of grasses in soybeans, field corn, sweet corn, or popcorn. The tank mixture will provide control / partial control of the weeds listed in Table 2 and the grasses listed on the tank mix partner's label. See Table 1. for use rates in mixture with a grass control herbicide.

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**CROP FAILURE -- IMMEDIATE REPLANTING**

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If soybeans or corn treated with Appeal EC is lost due to a natural catastrophe such as hail or frost, soybeans or corn can be replanted immediately, provided this is not restricted on the label of a product used previously or by a product applied in a tank mixture with Appeal EC.

For control of weeds in the replanted crop, Appeal™ EC may be applied postemergence a second time but the total amount of Appeal™ EC applied during the cropping season must not exceed 1.25 fl. oz./A.

\*\*\*\*\* FOR USE IN COTTON DEFOLIATION \*\*\*\*\*

**GENERAL INFORMATION**

Appeal™ EC may be used as a harvest aid to defoliate cotton. As with all cotton defoliant, proper application timing and coverage is critical for good performance and should be based on local Extension Service recommendations.

**Note:** Appeal EC is NOT REGISTERED FOR USE in California or Arizona.

**WHEN TO APPLY**

In general, Appeal™ EC should be applied **ONLY**

1. after all bolls to be harvested have matured,
2. when 60% of the bolls are open, AND
3. there are no more than four nodes between the highest first position cracked boll and the highest first position harvestable boll.

**DO NOT APPLY ANY LATER THAN 3 DAYS (72 Hours) PRIOR TO HARVEST.**  
This product requires a pre-harvest interval (PHI) of 3 days.

**CONDITIONS THAT AFFECT LEAF DROP**

GROWING CONDITIONS	EFFECT
Favorable	Leaf drop typically 4-7 days after application
Drought or other crop stress conditions  Cool Temperatures (below 55° F)	Can reduce the number of leaves dropped or increase time required for leaf drop to 9-14 days
Rank cotton with 60% or fewer open bolls	A second application of Appeal™ EC may be needed
Rain	Appeal™ EC is rainfast 1 hour after application



**APPEAL™ EC USE RATES FOR COTTON DEFOLIATION**

Appeal™ EC may be applied alone or in combination with other harvest aids labeled for use on cotton.

AMOUNT OF APPEAL™ EC TO APPLY	APPLICATION INTERVAL	MAXIMUM AMOUNT PER SEASON
0.6 – 0.9 fl. oz. / A	If necessary, repeat application 6-10 days later with Appeal™ EC alone or in combination with other harvest aids.	Do not apply more than 1.25 fl. oz. Appeal™ EC per Ac per season.

**MIXING INSTRUCTIONS**

**Spray Additives**

An adjuvant approved for use on growing crops is **required** with Appeal™ EC.

**1. Appeal™ EC Alone**

For best performance, apply Appeal™ EC with:

Adjuvant/Description	Rate
<b>Crop oil concentration (COC)</b> Petroleum or vegetable based containing not less than 10% emulsifier	1 pt. per acre <b>Note:</b> the concentration should not exceed 2.5% volume/volume.

The following adjuvants may also be used:

Adjuvant/Description	Rate
<b>Non-ionic surfactant (NIS)</b> With a minimum of 80% of the constituents effective as a spray adjuvant	1 qt. per 100 gals. or a spray volume concentration of 0.25%
<b>Silicone based surfactant</b>	1 qt. per 100 gals or a spray volume concentration of 0.25% or as specified on the adjuvant label.

## 2. Appeal™ EC in Tank Mixtures with Other Harvest Aids

When tank mixing Appeal™ EC with other harvest aids, use the adjuvant recommended for use with the tank mix partner. Follow all restrictions and precautions on the tank mix partner's label.

### Compatibility Test

A jar test is recommended before mixing to ensure Appeal™ EC compatibility with tank mix partners and adjuvants. The following test assumes a spray volume of 25 gallons per acre. For other spray volumes, make appropriate changes in the ingredient rates.

1. Add 1.0 pt. of water to each of 2 one-quart jars with tight lids.

**Note:** Use the same source of water and the other components in the compatibility test that will actually be tank mixed and applied. It is important that all components are mixed at a temperature similar to the temperature of those used for the actual application.

2. To one of the jars, add ¼ tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (¼ tsp. is equivalent to 2 pt./100 gals. spray). Shake or stir gently to mix.
3. To **both** jars, add the appropriate amount of harvest aid. If more than one harvest aid is used, add them separately with dry harvest aids first, flowables next, and emulsifiable concentrates last. Finally, add the appropriate amount of any adjuvants that will be used. After **each** addition, shake or stir gently to thoroughly mix. The appropriate amount of harvest aids for this test follows:

**Dry Harvest Aids and Adjuvants:** For each pound to be applied per acre, add 1.4 tsp. to each jar.

**Liquid Harvest Aids and Adjuvants:** For each pint to be applied per acre, add 0.5 tsp. or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15-30 minutes and look for separation, large flakes, precipitates, gels, heavy oil film on the jar, or other signs of incompatibility. Determine if a compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility.
  - a. Slurry the dry harvest aid(s) in water before addition, or

- b. Add  $\frac{1}{2}$  the compatibility agent to the water and the other  $\frac{1}{2}$  to the emulsifiable concentrate or flowable harvest aid before addition to the mixture. If incompatibility is still observed, do not use the mixture.

After compatibility testing is complete, dispose of any pesticide wastes according to the **Storage and Disposal** section of this label

### **How to Mix**

1. The spray equipment must be clean before using this product. If it is contaminated with other materials, mixing problems and/or clogging or poor performance may occur.
2. Prepare no more spray mixture than is needed for the immediate application, and do not let the spray mixture stand overnight in the spray tank.
3. Maintain maximum agitation throughout the spraying operation.
4. Water-soluble packets must always be the first material put into the spray tank after water. Water-soluble packets must be completely dissolved and dispersed in **clean** water only before any other tank mix partners, including adjuvants, are added to the spray solution.

Flush the spray equipment thoroughly after each use and apply rinsate to a previously-treated area.

### **Mixing Appeal EC Alone**

1. Add  $\frac{1}{4}$ - $\frac{1}{2}$  of the required amount of **clean** water to the spray or mixing tank.
2. With the agitator running, add the required amount of Appeal EC to the spray tank. Continue agitation in the spray tank and allow product to fully and uniformly disperse.
3. Add the spray adjuvant and continue agitation while adding the rest of the water.
4. Maintain agitation until all of the mixture has been applied.

### Mixing Appeal™ EC in Tank Mixtures with Other Cotton Harvest Aids

Appeal™ EC is compatible with most commonly used harvest aids. BEFORE MIXING APPEAL™ EC WITH OTHER REGISTERED PRODUCTS, READ THE LABEL OF THE TANK-MIX PARTNER TO BE CERTAIN IT IS LABELED FOR THE USE ON COTTON AND THAT USE PATTERNS ARE COMPATIBLE WITH THOSE OF APPEAL™ EC. When using Appeal™ EC in a tank mixture with other harvest aids, observe the most restrictive label limitations and precautions for the products being used.

### Cotton Harvest Aids – Tank Mix Partners for Appeal™ EC

TANK MIX PARTNERS	COMMENTS
Prep™ (or other brands of ethephon)	For cotton defoliation, it is not necessary to tank-mix Appeal™ EC with other harvest aids. However, at labeled boll opening rates, Prep™ (or other brands of ethephon) can be tank-mixed with Appeal™ EC to accelerate opening of mature cotton bolls.
Accelerate®, CottonQuik™, Def®6, Dropp®, Dropp® Ultra™, Finish®, Folex®, Ginstar®, Harvade® 5F, or Roundup® Ultra.	
Cyclone®, paraquat-based products, Starfire®, or sodium chlorate	<p><b>For best results,</b> apply desiccants <i>after</i> the initial Appeal™ EC application.</p> <p><b>Note:</b> To aid in desiccation, these products can also be tank mixed with Appeal™ EC, but these products can contribute to cotton leaf stick.</p>

### Tank Mixing Steps

1. Add ¼ to ½ of the required amount of **clean** water to the spray or mixing tank.
2. With the agitator running, drop the required number of packets of any products packaged in water-soluble packets into the tank all at once. Continue agitation in the spray tank and allow any packets to completely dissolve and the contents of any packets to fully and uniformly disperse.
3. While maintaining agitation, continue filling the spray tank. When the tank is ¾ full, add any dry formulation tank mix partners and allow them to completely and uniformly disperse.

4. Add the required amount of Appeal™ EC to the spray tank while maintaining agitation. After the product has completely and uniformly dispersed into the tank mix, *add any other liquid tank mix partners and allow them to completely and uniformly disperse.*
5. Add the proper amount of spray adjuvant and continue agitation while adding the remaining water.
6. Complete filling the tank with clean water and maintain sufficient agitation at all times to ensure surface action until the spray mixture is uniform.
7. To avoid product degradation, apply the Appeal™ EC spray mixture within 48 hours of mixing, and do not leave the spray mixture in the tank without continuous agitation.
8. After use, thoroughly clean the sprayer according to this label (See Cleaning Spray Equipment) and any tank mix partner labels.

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## **APPLICATION PROCEDURES AND PRECAUTIONS**

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### **Chemigation**

Do not apply this product through any type of irrigation equipment

### **Aerial Application (for use as a cotton defoliant only)**

1. Use a minimum of 5 gallons of water per acre.
2. Take care to ensure that the application does not drift to non-target areas.

### **Ground Application**

1. Apply Appeal™ EC in a minimum of 10 gals of water per acre at 20 to 40 psi pressure at the nozzles.
2. Use a pump with enough capacity to maintain a rippling or rolling action in the spray tank.
3. For a uniform spray mixture, agitation during mixing and application is required.

### **Spray Drift Precautions**

Do not allow spray to drift onto adjacent land or crops. When drift may be probable, do everything possible to reduce spray drift, including:

1. Do not spray if wind speeds are gusty or become 10 mph or greater.
2. Use extreme caution when conditions favor drift (high temperatures, low relative humidity).
3. Do not apply during a temperature inversion. If an inversion is suspected, consult the local weather service before applying Appeal™ EC.
4. These practices can further reduce drift:
  - a. Using nozzles that provide a uniform droplet size. Use spray nozzles that provide medium-coarse droplets (250-400 microns VMD). Nozzles that produce extremely small droplets are more likely to cause spray drift.
  - b. Apply as close to target plants as practical while maintaining a good spray pattern for adequate spray coverage.

**CLEANING SPRAY EQUIPMENT**

The sprayer must be cleaned before and after use of Appeal™ EC. Failure to do so may result in unsatisfactory results with Appeal™ EC or injury to other crops sprayed with the equipment. Refer to the label of the product used previously or tank mixed with Appeal™ EC for additional cleaning instructions.

When Appeal™ EC has been used alone:

1. Fill the sprayer with clean water.
2. Add a commercial sprayer cleaner.
3. Circulate the mixture through the system.
4. Spray approximately ½ through the hose, boom, and nozzles to an area that has already been treated.
5. Drain the remaining solution.
6. Rinse the entire system with clean water.
7. Spray the rinsate on an area that has already been treated.

When Appeal™ EC has been tank mixed:

Refer to the label of the product used previously or tank mixed with Appeal™ EC for cleaning instructions.

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## ROTATIONAL CROPS

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Following harvest, any crop may be planted following soybeans, corn or cotton treated with Appeal™ EC alone. There are no rotational crop restrictions.

**Note:** For rotational crop restrictions when Appeal™ EC is used in tank mixtures or sequentially with other products, refer to the rotation intervals on the other product label for possible additional restrictions.

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## STORAGE AND DISPOSAL

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Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

### **Pesticide Disposal**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### **Container Disposal**

Triple rinse (or equivalent.) Then offer for recycling or reconditioning, or puncture, and dispose of in a sanitary landfill, or incinerate, or if allowed by state and local authorities, dispose of by burning. Stay out of smoke from burning container.

For minor spills, leaks, etc. follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-914-682-8934, day or night.

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## PRECAUTIONARY STATEMENTS

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### **Hazards to Humans and Domestic Animals**

#### **WARNING / AVISO**

Causes substantial, but temporary, eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). Harmful if swallowed or absorbed through skin. Avoid contact with skin. Remove contaminated clothing and wash before reuse. Discard clothing and/or other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Wash thoroughly with soap and water after handling.

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eyes open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or Clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of soap and water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>NOTE TO PHYSICIAN</b>	
Contains petroleum distillate – vomiting may cause aspiration pneumonia.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOT LINE NUMBER</b>	
For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call <b>1-914-262-9774</b>	

### **Personal Protective Equipment (PPE)**

#### **Applicators and other handlers must wear:**

- long-sleeved shirt and long pants
- chemical-resistant gloves such as barrier laminate, butyl rubber  $\geq$  14 mils, or viton  $\geq$  14 mils
- shoes plus socks
- protective eyewear (goggles or face shield)



Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash all PPE separately from other laundry.

**Engineering Control Statements**

When handlers use closed systems or enclosed cabs 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.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**Environmental Hazards**

This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

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U.S. Patent No. 4,816,063

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