

71711-7

4/13/2011

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Marie A Maks  
Nichino America.  
4550 New Linden Hill Road - Suite 501  
Wilmington, DE 19808

APR 13 2011

Dear Ms. Maks:

Subject: Add New Use Patterns and Label Revisions  
ET Herbicide/Defoliant  
EPA File Symbol 71711-7  
Your Submission Dated July 23, 2010

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

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a. For clarity in the Rotational Crop Restrictions Table modify the last row to read similar to the following:
 

All other rotational crops do not plant for 30 days following the last application of this product.
  - b. Revise the use restriction to read:
 

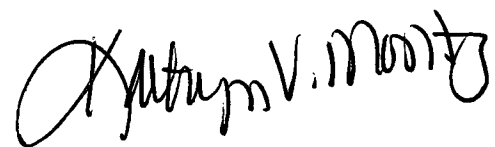
Do not apply more than 2.0 fl. oz/A per season prior to planting and/or emergence of crop.
  - c. Add a restriction to limit the total seasonal use rate on corn, soybeans and wheat/triticale from all applications similar to the restriction that appears on the label for all of the cotton uses.
  - d. For Potato Desiccation you should reinstate the efficacy use information that was deleted since information on desiccation is not included in the Use Information section.

e. The proposed directions for Noncrop Weed Control on page 14 are confusing. Reinstate the restriction "Do not apply by air for this use". If you wish to add aerial application to the industrial sites and the other listed non-crop sites, you must submit an application for amended registration that specifies the application rate of 0.5 to 2.0 fl. oz/acre and add the restriction "Do not make more than 3 applications or exceed 5.5 fl oz/acre per season" to be consistent with the non-crop aerial application on the last accepted label. Only sites suitable for aerial application should be included in the proposed directions for use.

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

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391. For your information enclosed is a copy of the scientific review.

Sincerely yours,



Kathryn V. Montague  
Product Manager 23  
Herbicide Branch  
Registration Division (7505P)

Enclosure



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER - PELIGRO**

Corrosive. Causes irreversible eye damage. Do not get in eye, on skin, or on clothing. Wear goggles or face shield when handling. Harmful if swallowed. Harmful if absorbed through skin. Wash thoroughly with soap and water after handling.

**Personal Protective Equipment (PPE)**

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-resistance category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical resistant (such as nitrile or butyl) gloves
- Shoes plus socks
- Protective eyewear
- For overhead exposure, wear chemical resistant headgear

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

<p><b>User Safety Recommendations</b></p> <p>Users should:</p> <ul style="list-style-type: none"> <li>• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.</li> <li>• Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li> </ul>
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**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.

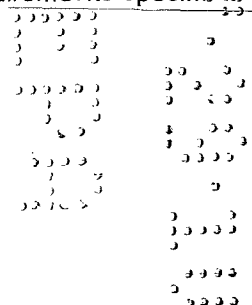
**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. This product may contaminate water through drift of spray in wind or via runoff events. Use care when applying in areas adjacent to any body of water. 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 washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Do not apply if rainfall is expected within one hour.

**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 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 12 hours.

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
- Chemical resistant (such as nitrile or butyl) gloves
- Shoes plus socks
- Protective eyewear

**NONAGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or greenhouses. For other uses, including interiorscapes and other nonagricultural uses, do not enter treated areas without protective clothing until sprays have dried.

**USE INFORMATION**

ET Herbicide/Defoliant is designed for use as a contact herbicide for broadleaf weed control, defoliation, and desiccation.

For best results, use ET Herbicide/Defoliant for control of annual or perennial herbaceous broadleaf weeds less than 4 inches in height, or rosettes less than 3 inches in diameter. Use the higher rates and spray volumes for control of larger weeds; control may be reduced with weeds larger than 4 inches.

ET Herbicide/Defoliant must be tank mixed with another foliar active broadleaf herbicide for complete control of most broadleaf weeds.

Use an approved agriculture buffering agent, buffering to less than pH 7.5, if using ET Herbicide/Defoliant in a water source greater than or equal to pH 7.5. Always buffer the water source **BEFORE** adding ET Herbicide/Defoliant to the spray tank.

ET Herbicide/Defoliant is a contact herbicide and defoliant and requires thorough coverage for complete broadleaf weed control and defoliation/desiccation.

Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground unless otherwise specified.

~~Do not apply ET Herbicide/Defoliant through any type of irrigation system.~~

ET Herbicide/Defoliant is rainfast within one hour after application.

**ROTATIONAL CROP RESTRICTIONS**

Do not plant rotational crops, other than those listed in the table below, for 30 days following the last application of ET Herbicide/Defoliant.

Crop/Crop Group	Rotational/Plantback Intervals
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Corn Cotton Potatoes Soybeans Wheat, Triticale	0 days following application
Bulb Vegetables Cereal Grains Cole Crops Cucurbits Fruiting Vegetables Leafy Vegetables Legumes Oil Seeds Root and Tuber Vegetables Sugarcane	1 day following preplant burndown application
All other crops/crop groups	30 days following application

**WEEDS CONTROLLED**

The following broadleaf weed species can be controlled up to 4 inches in height or less, or rosettes of 3 inches in diameter or less, by applications of ET Herbicide/Defoliant. Tankmixes of ET Herbicide/Defoliant with other herbicides may be needed for control of these weed species if larger than 4 inches tall or rosettes of greater than 3 inches in diameter.

Amaranth, Palmer Bedstraw Beggartick, hairy Beggardweed, Florida Bindweed, field Buckwheat, wild Canola Carpetweed Celery, wild Chickweed Cocklebur Dandelion Dock, curly Eclipta Eveningprimrose, cutleaf Henbit Knotweed, prostrate	Kochia Ladysthumb Lambsquarters, common Lettuce, prickly Mallow, common Milkthistle Morningglory Nettle, stinging Nightshade, black Panicle Willoweed Pigweed, redroot Pigweed, smooth Pineapple weed Poinsettia, wild Poison-ivy Prickly Sida Purslane, common	Radish, wild Ragweed, common Ragweed, giant Rocket, London Sesbania, hemp Smartweed, Pennsylvania Smellmelon Sowthistle, annual Spurge, leafy Sunflower, common Teaweed Thistle, Canadian Thistle, Russian Toadflax, Dalmatian Velvetleaf Volunteer Cotton Waterhemp, tall
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Tank mixtures of ET Herbicide/Defoliant with 2,4-D or glyphosate herbicide will provide enhanced control of the following weed species:

Tank Mixtures with ET Herbicide/Defoliant + 2, 4-D	Tank Mixtures with ET Herbicide/Defoliant + glyphosate	
Bindweed, field Buckwheat, wild Chickweed, common Dandelion, common	Dandelion, common Eveningprimrose, cutleaf Geranium, Carolina Horsenettle (suppression)	Rocket, London Shepherd's purse Sicklepod Sowthistle, annual
Kochia Marestail Poison-ivy Thistle, Russian Wild mustard	Lambsquarters, common Morningglory Poison-ivy Purslane, common Radish, wild	Thistle, Canada Thistle, Russian Virginia-creeper

**MIXING DIRECTIONS**

Add 1/2 to 3/4 of the required amount of water to the spray tank. Start agitation. Add the required amount of ET Herbicide/Defoliant and the remaining amount of water. Mix only as much spray solution as can be sprayed within four hours. Storage and use of the previous day's spray mix may result in reduced activity.

Use an approved agriculture buffering agent, buffering to less than pH 7.5, if using ET Herbicide/Defoliant in a water source greater than or equal to pH 7.5. Always buffer the water source BEFORE adding ET Herbicide/Defoliant to the spray tank.

**TANK MIXTURES**

ET Herbicide/Defoliant may be applied as a tankmix or in sequential application with other harvest aid, fungicide, insecticide or herbicide products. Weather, crop conditions, or the presence of certain weeds, crop damaging insects, or diseases will indicate the inclusion of other pesticides in the defoliation or desiccation application. Apply with grass herbicides if grassy weeds are present.

**Read and follow all label directions for each tankmix product. Always use in accordance with the most restrictive of label precautions and limitations.**

**Note:** It is recommended that the compatibility of ET Herbicide/Defoliant in any tankmix combination be tested before use. To determine the physical compatibility with other products, use a jar test, as described below:

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

**SPRAY DRIFT**

Avoid spray drift to all other crops and nontarget areas. Do not apply when weather conditions may cause drift. Do not allow this product to drift onto nontarget areas. Drift may result in illegal residues or injury to adjacent crops and vegetation, in the form of leaf yellowing and defoliation. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions. Use of larger droplet size will also reduce spray drift.

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

The interaction of equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. Droplet size, boom height, and wind speed are the primary factors determining drift. The specific application conditions required for the use of this product are described below.

**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.

**Maintenance of Nozzles** – Periodic inspection and subsequent replacement of nozzles to ensure proper chemical application is recommended.

### **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 largest 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 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.)

### **Wind**

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 wind 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 and 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 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.

### **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, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

## **EQUIPMENT CLEANING**

**Do not allow the spray solution to dry in the application equipment. After application and before using the sprayer equipment for any other applications, the sprayer must be thoroughly cleaned. Applicators must ensure proper equipment clean-out for any other products mixed with ET Herbicide/Defoliant as provided on the other product label(s).** Immediately following application, clean all equipment thoroughly with detergent or a spray tank cleaner and water as described below.



Should residues of ET Herbicide/Defoliant remain in inadequately cleaned equipment, they may be released in subsequent applications and cause injury to crops.

1. Drain sprayer tank, hoses, and spray boom and thoroughly rinse with clean water the inside of the spray tank, sprayer hoses, boom, and nozzles to remove any sediment or residues.
2. Fill the tank  $\frac{1}{2}$  full with clean water, add the appropriate detergent (follow manufacturer's directions for use). Fill tank to capacity and operate the sprayer with agitation for 15 minutes to flush hoses, boom, and nozzles.
3. Drain the sprayer tank, lines, and booms. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray nozzles, tips, and screens.
4. Dispose of all cleaning solutions, rinsate, and washwaters in accordance with Federal, state, and local regulations.

#### APPLICATION AND DOSAGE

Crop	Application	Pest	Rate/Acre	Directions for Use
<b>Corn</b> (field corn, popcorn, seed corn, corn silage, corn stover)	Preplant Burndown, At Plant, Before Crop Emergence	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• Do not apply more than 2.0 fl oz/acre per season for this use.</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> </ul>
<b>Corn</b> (field corn, popcorn, seed corn, corn silage, corn stover)	Postemergence	Listed Broadleaf Weeds	0.5 to 1.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• ET Herbicide/Defoliant can be applied from crop emergence to the V4 growth stage.</li> <li>• Do not apply postemergence to sweet corn.</li> <li>• Do not make more than 2 applications per season for all postemergence use patterns in this crop.</li> <li>• Do not apply more than 1.0 fl oz/acre per season for all postemergence use patterns in this crop.</li> <li>• Do not use crop oils or crop oil concentrates for postemergence applications.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> <li>• Some temporary herbicidal leaf-speckling may appear on the crop. This effect is transient and will NOT appear on new growth.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> </ul>

				<ul style="list-style-type: none"> <li>• Do not harvest corn for silage within 50 days after last application of ET Herbicide/Defoliant.</li> <li>• Do not harvest corn for grain or stover within 90 days after last application of ET Herbicide/Defoliant.</li> </ul>
<b>Corn</b> (field corn, popcorn, seed corn, corn silage, corn stover)	Postemergence Directed	Listed Broadleaf Weeds	0.5 to 1.0 fl oz/acre	<ul style="list-style-type: none"> <li>• ET Herbicide/Defoliant can be applied from crop emergence to the V8 growth stage using directed spray or a drop nozzle application technique.</li> <li>• Directed or drop nozzle applications should only be made when the corn has achieved a sufficient height for the spray to be directed beneath the corn leaves.</li> <li>• Do not apply ET Herbicide/Defoliant directly into the whorl when making a directed or drop nozzle application.</li> <li>• Do not apply postemergence to sweet corn.</li> <li>• Do not make more than 2 applications per season for all postemergence use patterns in this crop.</li> <li>• Do not apply more than 1.0 fl oz/acre per season for all postemergence use patterns in this crop.</li> <li>• Use the higher rate for hard to control weeds.</li> <li>• Some temporary herbicidal leaf speckling may appear on the crop. This effect is transient and will NOT appear on new growth.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not harvest corn for silage within 50 days after last application of ET Herbicide/Defoliant.</li> <li>• Do not harvest corn for grain or stover within 90 days after last application of ET Herbicide/Defoliant.</li> </ul>

Crop	Application	Pest	Rate/Acre	Directions for Use
<b>Cotton</b>	Preplant Burndown, At Plant, Before Crop Emergence	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• Do not apply more than 2.0 fl oz/acre per season for this use.</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>

				<ul style="list-style-type: none"> <li>• Allow a minimum of 30 days between applications for this use.</li> </ul>
Cotton	Postemergence	Listed Broadleaf Weeds	1.0 to 2.0 fl oz/acre alone	<ul style="list-style-type: none"> <li>• <b>Do NOT apply by air for this use.</b></li> <li>• Apply to cotton having less than 3 inches of stem bark using hooded ground equipment only.</li> <li>• Apply ET Herbicide/Defoliant in 20 to 30 gallons per acre using hooded ground equipment.</li> <li>• Avoid contact with desirable vegetation.</li> <li>• Do not exceed 2.0 fl oz/acre per season for this use pattern.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not apply within 7 days of harvest.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>
			0.5 to 2.0 fl oz/acre in tank mixtures with other herbicides	
Cotton	Postemergence Layby	Listed Broadleaf Weeds	0.5 to 1.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Do NOT apply by air for this use.</li> <li>• Apply when the cotton has attained an average height of 18 inches or more and having at least 3 inches of stem bark using hooded or postdirected ground spray equipment only.</li> <li>• Avoid contact with desirable vegetation.</li> <li>• Do not apply more than 1.0 fl oz/A per season for this use pattern.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not apply within 7 days of harvest.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>
Cotton	Defoliation	Defoliation of Cotton	1.5 to 2.75 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply when sufficient mature bolls have developed to produce desired yield; generally greater than 60%.</li> <li>• Adequate defoliation is generally achieved within 7 to 14 day depending upon weather conditions.</li> <li>• Apply using 20 to 30 gallons of water per acre by ground or 5 gallons of water per acre by air.</li> <li>• Do not exceed 2 applications or 5.5 fl oz/acre per season for defoliation of cotton.</li> <li>• Applications must be a minimum of 7 days apart.</li> <li>• Do not apply within 7 days of harvest.</li> <li>• ET Herbicide/Defoliant may be tank mixed or applied in sequence with other defoliant products such as, but not limited to, Cottonquik<sup>®</sup>, Cyclone<sup>®</sup>, DEF<sup>®</sup>, Dropp<sup>®</sup>, Finish<sup>®</sup>, Folex<sup>®</sup>, Ginstar<sup>®</sup>, Gramoxone<sup>®</sup>, Prep<sup>™</sup>, and/or Roundup<sup>®</sup>.</li> <li>• Refer to page 4 for crop</li> </ul>

				rotations/plantback restrictions.
<b>Cotton</b>	Harvest Preconditioning	Elimination of unwanted top growth/foilage  Reduce nonproductive terminal growth	0.3 to 0.75 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply when the plant is actively growing and has between 10% to 20% open bolls.</li> <li>• Apply using 20 to 30 gallons of water per acre by ground or 5 gallons of water per acre by air.</li> <li>• ET Herbicide/Defoliant is a contact material, thus optimum results are achieved with thorough coverage on target growth/foilage.</li> <li>• When using a degree day monitoring system, apply when plant maturity has reached NAWF=5 plus receiving an additional 425-625 degree heat units.</li> <li>• ET Herbicide/Defoliant for harvest preconditioning should be avoided where the crop, or portions of the crop, are stressed.</li> <li>• Do not exceed 5.5 fl oz/acre per season for defoliation of cotton.</li> <li>• Applications must be a minimum of 7 days apart.</li> <li>• Do not apply within 7 days of harvest.</li> <li>• ET Herbicide/Defoliant can be used alone or in combination with boll openers depending on desired boll opening effects.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> </ul>
<b>Cotton (all uses)</b>	Do not apply more than 8.5 fl oz/acre per growing season to cotton.			

<b>Crop</b>	<b>Application</b>	<b>Pest</b>	<b>Rate/Acre</b>	<b>Directions for Use</b>
<b>Soybeans</b>	Preplant Burndown, At Plant, Before Crop Emergence	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• Do not apply more than 2.0 fl oz/acre per season for this use.</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• Refer to page 4 for crop rotations/plantbackrestrictions.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> </ul>
<b>Soybeans</b>	Postemergence	Listed Broadleaf Weeds	0.4 to 1.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• ET Herbicide/Defoliant can be applied from crop emergence to the V6 growth stage.</li> <li>• Allow a minimum of 30 days between</li> </ul>

				<p>applications for this use.</p> <ul style="list-style-type: none"> <li>• Do not apply more than 1.0 fl oz/acre per season for this use.</li> <li>• Do not make more than 2 applications per season for this use.</li> <li>• Do not use crop oils or crop oil concentrates for postemergence applications.</li> <li>• Do not graze soybean forage or cut for hay within 7 days of last ET Herbicide/Defoliant applications.</li> <li>• Do not harvest soybeans for grain within 70 days after last application of ET Herbicide/Defoliant.</li> <li>• Some temporary herbicidal leaf speckling may appear on the crop. This effect is transient and will NOT appear on new growth.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>
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Crop	Application	Pest	Rate/Acre	Directions for Use
Wheat, Triticale	Preplant Burndown, At Plant, Before Crop Emergence	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• Do not apply more than 2.0 fl oz/acre per season for this use.</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> </ul>
Wheat, Triticale	Postemergence	Listed Broadleaf Weeds	0.5 to 1.0 fl oz/acre	<ul style="list-style-type: none"> <li>• ET Herbicide/Defoliant can be applied from crop emergence to the appearance of the flag leaf. <b>DO NOT</b> apply ET Herbicide/Defoliant if the flag leaf is visible.</li> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• Do not apply more than 1.0 fl oz/acre for this use per season.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not apply more than 2 applications per season.</li> <li>• Use nonionic surfactant at a concentration of 0.5% for optimum weed control.</li> <li>• Do not harvest wheat or triticale for hay within 21 days of last ET Herbicide/Defoliant application.</li> <li>• Do not harvest wheat or triticale for grain</li> </ul>

				<p>within 60 days after last application of ET Herbicide/Defoliant.</p> <ul style="list-style-type: none"> <li>• Some temporary herbicidal leaf speckling may appear on the crop. This effect is transient and will NOT appear on new growth.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>
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Crop	Application	Pest	Rate/Acre	Directions for Use
<b>Bulb Vegetables</b> <b>Cereal Grains</b> <b>Cole Crops</b> <b>Cucurbits</b> <b>Fruiting Vegetables</b> <b>Leafy Vegetables</b> <b>Legumes</b> <b>Oil Seed Crops</b> <b>Root and Tuber Vegetables</b> <b>Sugarcane</b>	Preplant Burndown	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 10 gallons water per acre by ground or 5 gallons water per acre by air.</li> <li>• The addition of nonionic surfactant at a concentration of 0.25% or COC at 1.0% is recommended for optimum weed control.</li> <li>• For crop listed in this section, do not apply within 24 hours of planting.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Do not make more than 3 applications or exceed 5.5 fl oz/acre per crop year.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> </ul>

Crop	Application	Pest	Rate/Acre	Directions for Use
<b>Potatoes</b>	Desiccation	Potato Foliage and Vines  Listed Broadleaf Weeds	2.75 to 5.5 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply as a foliar spray in the early stage of crop senescence.</li> <li>• A repeat application of ET Herbicide/Defoliant or another desiccant may be needed under certain climatic conditions for complete desiccation.</li> <li>• Apply by air at 5 gallons per acre or 20 to 50 gallons per acre by ground equipment.</li> <li>• Make 1 to 2 applications at a minimum 7 day interval.</li> <li>• Do not exceed 2 applications or 11 fl oz/acre per season for desiccation.</li> <li>• Do not apply within 7 days of harvest.</li> </ul>

Crop	Application	Pest	Rate/Acre	Directions for Use
<b>Dates</b> <b>Feijoa</b> <b>Figs</b> <b>Grapes</b> <b>Kiwi Fruit</b> <b>Mango</b> <b>Olives</b> <b>Persimmons</b> <b>Pome Fruit</b> <b>Pomegranates</b>	Postharvest, Dormant, Prebloom	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Do NOT apply by air for this use.</li> <li>• ET Herbicide/Defoliant may be applied from postharvest through before bloom.</li> <li>• Apply ET Herbicide/Defoliant in a minimum of 10 gallons spray solution per acre in a broadcast or band directed application.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not make more than 3 applications or exceed 5.5 fl oz/acre during the growing</li> </ul>

<b>Stone Fruit Tree Nuts</b>				<p>season</p> <ul style="list-style-type: none"> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• Do not allow spray to contact green bark of trunk area on young grape vines and fruit or nut trees.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>
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Crop	Application	Pest	Rate/Acre	Directions for Use
<b>Nonbearing Tree Fruit, Nut Trees and Vine Crops (Excluding Citrus)</b>	Full Season Weed Control	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Do NOT apply by air for this use.</li> <li>• ET Herbicide/Defoliant may be applied full season to nonbearing crops listed in this section.</li> <li>• Do not harvest edible crops for 12 months following the last application of ET Herbicide/Defoliant.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not make more than 3 applications or exceed 5.5 fl oz/acre during the growing season</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• Do not allow spray to contact green bark of trunk area on young grape vines and fruit or nut trees.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>

Use	Application	Pest	Rate/Acre	Directions for Use
<b>Fallow Bed and Crop Stubble</b>	Preplant Burndown	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not make more than 3 applications or exceed 5.5 fl oz/acre during the fallow period.</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• For crops not listed on this label, applications must be made at least 30 days prior to planting.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>

Use	Pest	Rate/Acre	Directions for Use
<b>Non-Cropland, Uncultivated Agricultural Areas, Conservation Reserve Program Land/Federal</b>	Listed Broadleaf Weeds	0.5 to 2.0 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 10 gallons spray solution per acre by ground.</li> <li>• Allow a minimum of 30 days between applications for this use.</li> <li>• Do not make more than 3 applications or exceed 5.5 fl oz/acre during the fallow period.</li> <li>• The addition of a spray tank adjuvant at a concentration of</li> </ul>

<b>Set-Aside Acreage* (non food producing)</b>			0.5% to 2.0% is recommended for optimum weed control. <ul style="list-style-type: none"> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>
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\*Follow federal, state and local rules for use on grass and hay.

Use	Pest	Rate/Acre	Directions for Use
<b>Noncrop Weed Control:</b> <b>Airports and Airfields,</b> <b>Commercial Plants,</b> <b>Storage and Lumber Yards,</b> <b>Fencelines and Fence Rows,</b> <b>Farmyards and Farm Buildings,</b> <b>Barrier Strips and Firebreaks,</b> <b>Equipment Areas,</b> <b>Nurseries and Ornamental Plantings,</b> <b>Christmas Trees and Conifer Plantation Site Preparation,</b> <b>Railroads,</b> <b>Roadside and Utility Rights-of-Way,</b> <b>Fuel Tank Farms and Pumping Stations,</b> <b>Dry Ditches and Ditchbanks,</b> <b>Vacant Lots,</b> <b>or Other Listed Agricultural and Industrial Non-Crop Sites</b>	Listed Broadleaf Weeds	0.5 to 2.75 fl oz/acre	<ul style="list-style-type: none"> <li>• Apply ET Herbicide/Defoliant in a minimum of 5 gallons spray solution per acre by air or 20 - 40 gallons spray solution per acre by ground.</li> <li>• Avoid contact with desirable vegetation.</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 2.0% is recommended for optimum weed control.</li> <li>• Do not exceed 3 applications or 9.7 fl oz/acre per season using ground or backpack or similar spray equipment.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> <li>• For applications to ornamental plantings, do not allow people (other than the applicator) or pets on treatment area during the application and until sprays have dried.</li> </ul>

**Established Ornamental Turf Lawns (residential, industrial, and institutional) Parks, Cemeteries, Athletic Fields, Golf Courses (fairways, aprons, tees, and roughs), Sod Farms, and Similar Turf Areas**

For applications to ornamental turf, do not allow people (other than the applicator) or pets on treatment area during the application and until sprays have dried.

**Spray Concentrate**

Make an appropriate amount of spray concentrate for the area to be treated by adding 8 fl oz of ET Herbicide/Defoliant to 120 fl oz of water (e.g., 1 fl oz ET to 15 fl oz water, or 0.5 fl oz ET to 7.5 fl oz water). Use the appropriate amount of concentrate as specified in the dosage tables below for application by pressure (pump-up) sprayer, hose-end applicator, or similar application equipment.

**Spot treatment: Pressure sprayer (Pump-up Sprayer)**

Adjust spray nozzle to give coarse spray. Aim at center of weed and spray to wet. A repeat application may be required for hard-to-kill broadleaf weeds. Do not use a hose-end sprayer for spot treatments.

Turf Species	Amount of Spray Concentrate (fl oz)	Amount of water to be applied (gallons)	Area treated (square feet)
<b>Cool season grasses:</b> bluegrass, fescue, ryegrass	1.0	4	1000
<b>Warm season grasses:</b> bahiagrass, common bermudagrass, centipedegrass, St. Augustinegrass, zoysiagrass	0.5	2	500

**Entire lawn: Dial Type Hose-End Sprayer**

Spray lawn using coarse spray. Apply evenly over area to be treated. One application should be sufficient. Effects begin to show after 24 to 48 hours with plant death occurring within 7 to 14 days.



- 1) Measure the total square footage area to be sprayed. To determine the total square foot area, multiply the length by the width of the lawn area to be treated. Subtract square footage of non-treatment areas including flower beds, shrub beds, driveways and sidewalks.
- 2) The application rate of this product is indicated in the following table for every per 1,000 square feet of lawn area. Add the appropriate amount of this product to the spray bottle, [jar], [reservoir], as indicated in the table for every 1,000 sq. ft. of lawn area to be treated.
- 3) Set the dial to the correct fluid ounce setting mix rate indicated in the following table.
- 4) Connect the hose, turn on water and spray evenly over the lawn treatment area.
- 5) Monitor the spray solution level in the spray bottle, [jar]. [reservoir], to gauge coverage.

Turf Species	Area to be Treated (square feet)	Amount of spray concentrate (fluid ounces)	Dial-type Hose-end sprayer mix setting (fl oz per gallon)
Cool season grasses: bluegrass, fescue, ryegrass	1000	1.0	2.0 fl oz
	5000	5.0	
	8000	8.0	

**Broadcast Application:** Spray using coarse spray. Apply evenly over area to be treated.

Turf Species	Amount of Spray Concentrate (fluid ounces)	Area treated (square feet)
Cool season grasses: bluegrass, fescue, ryegrass	1.0	1000
Warm season grasses: bahiagrass, common; bermudagrass; centipedegrass; St Augustinegrass; zoysiagrass	5.0	5000
	8.0	8000

Crop	Pest	Rate/Acre	Directions for Use
Pasture and Rangeland	Listed Broadleaf Weeds	0.75 to 2.25 fl oz/acre	<ul style="list-style-type: none"> <li>• Allow a minimum of 14 days between applications for this use.</li> <li>• Do not make more than 2 applications or exceed 5.5 fl oz/acre per season for this use.</li> <li>• Livestock may graze treated areas as soon as the spray solution has dried on the foliage.</li> <li>• The addition of a spray tank adjuvant at a concentration of 0.5% to 1.0% is recommended for optimum weed control.</li> <li>• Refer to page 4 for crop rotations/plantback restrictions.</li> <li>• Use a minimum of 2 gallons water per acre by air or 10 gallons water per acre by ground for this application.</li> <li>• Use the higher rate for hard to control weeds such as field bindweed and kochia.</li> </ul>

#### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

**Pesticide Storage:** Store in a cool place.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray 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:** Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse (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 ¼ 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 incineration, or, if allowed by State or local authorities, by burning. If burned, stay out of smoke.

**IMPORTANT: READ BEFORE USE**

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties, and limitations of liability.

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