

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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SEP - 5 2008

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

Dear Ms. Maks:

Subject:

Add New Uses on Pastures, Rangeland, and Post Emergent Application

to Corn, Soybeans and Wheat

ET Herbicide/Defoliant EPA File Symbol 71711-7

Your Submission Dated February 21, 2007

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

- 1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.
- 2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a. In the Use Restrictions section include all applicable restrictions for the other labeled crops.
  - b. In the Pasture and Rangeland directions for use in the Rate/Acre column according to our calculations the maximum rate for one application is 2.25 fl. oz./acre
- 3. Submit by May 15, 2012 the following Studies conducted on accordance with the Good Laboratory Practice Standards, 40 CFR Part 160 and appropriate test guidelines as referenced in EPA's Data Requirements for Registration Regulations, 40 CFR Part 158:
  - a. Multiresidue Methods reflecting recovery of pyraflufen-ethyl and Metabolite E-1 through FDA Protocols C and D with and without the use of Florsil cleanup.
  - b. An additional cattle feeding study conducted to determine residues of E-9 in milk and cattle tissues.

- 4. This registration expires on October 15, 2012.
- 5. Submit one (1) copy of your final printed labeling before you release the product for shipment. 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 the product bearing the amended labeling constitutes acceptance of these conditions.

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

If you have any questions concerning this letter, please contact me at 703-305-6224.

Sincerely yours,

∕Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505P)

nne J. Miller

**Enclosure** 

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REVISED VERSION (revision of ET7p and ET7s)

#### ET® Herbicide/Defoliant

A Contact Herbicide for Broadleaf Weed Control, Defoliation, and Desiccation (NOT FOR HOMEOWNER USE)

**Alternate Brand Name:** 

**EDICT® IVM Herbicide** 

For Noncrop Weed Control and Industrial Vegetation Management

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SACCEPTED with COMMENTS In EPA Letter Dated:

SEP - 5 2008 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

91711-7

EPA Reg. No. 71711-7

# KEEP OUT OF REACH OF CHILDREN DANGER - PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain to you in detail.)

	FIRST AID
If swallowed	<ul> <li>Call a doctor or poison control center immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</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. 'Avoid alcohol.</li> </ul>
If in eyes	<ul> <li>Immediately hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
	HOTLINE NUMBER
treatment. You	ct container or label with you when calling a poison control center or doctor, or going for may also contact 1-800-348-5832 for emergency medical treatment information. In case information may be obtained by calling 1-800-424-9300.
	NOTE TO PHYSICIAN
	eum distillates – vomiting may cause aspiration pneumonia. Probable mucosal damage cate the use of gastric lavage.

Net Contents:

Active Ingredient Made in Japan; Formulated and Packaged in U.S.A.
Nichino America, Inc.
4550 New Linden Hill Road, Suite 501
Wilmington, DE 19808
www.nichino.net

REVISED VERSION (revision of ET7p and ET7s)

# 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 evewear
- 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.

# **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.

#### **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.

SPRAY DRIFT

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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 ¾ 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.

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# **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).

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# **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.

#### GENERAL INFORMATION

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

ET is rainfast within one hour after application.

Only certified applicators are permitted to apply ET for turf and ornamental sites.

#### **USE RESTRICTIONS**

- Do not apply more than 8.5 fl oz/acre per growing season to cotton, or 11 fl oz/acre per growing season to potatoes.
- Do not apply more than 2 fl oz/acre to field corn, soybeans, or wheat, prior to planting, or emergence of crop only.
- Do not apply within 7 days of harvesting cotton or potatoes.
- Do not apply this product through any type of irrigation system.

#### **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**. Tankmixes of ET 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	Kochia	Radish, wild
Bedstraw	Ladysthumb	Ragweed, common
Beggartick, hairy	Lambsquarters, common	Ragweed, giant
Beggarweed, Florida	Lettuce, prickly	Rocket, London
Bindweed, field	Mallow, common	Sesbania, hemp
Buckwheat, wild	Morningglory	Shepherd's-purse
Canola	Mustard, wild	Sicklepod
Carpetweed	Nettle, stinging	Smartweed, Pennsylvania
Celery, wild	Nightshade, black	Smellmelon
Chickweed	Pigweed, redroot	Sowthistle, annual
Cocklebur	Pigweed, smooth	Spurge, leafy
Dandelion	Pineapple weed	Sunflower, common
Dock, curly	Poinsettia, wild	Thistle, Canadian
Eclipta	Poison-ivy	Thistle, Russian
Eveningprimrose, cutleaf	Purslane, common	Toadflax, Dalmatian
Henbit	`   '	Velvetleaf
Knotweed, prostrate		Waterhemp, tall

# MIXING DIRECTIONS

Add  $\frac{1}{2}$  to  $\frac{3}{4}$  of the required amount of water to the spray tank. Start agitation. Add the required amount of **ET** 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 agricultural buffering agent buffering to pH 7.5 or less if using **ET** in a water source of = pH 7.5.

#### **TANK MIXTURES**

ET 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.

Tank mixtures of **ET** with 2,4-D or glyphosate will provide enhanced control of the following weed species:

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

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 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.

#### **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 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 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 ½ 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.

#### ROTATIONAL CROP RESTRICTIONS

Do not plant rotational crops other than cotton, potato, corn, soybeans, or wheat for 30 days following the last application of this product.

# **APPLICATION AND DOSAGE**

#### COTTON

#### **Preplant Burndown**

For best results, use **ET** herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. **ET** herbicide may be applied preplant burndown to control broadleaf weeds or in tank mixtures with other labeled herbicides for broad spectrum weed control (see below).

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Cotton	Broadleaves and/or Grasses	0.5 to 2.0 fl oz/A plus other labeled herbicides in a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground*	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Treated areas may be replanted immediately with any crop listed on this label.</li> <li>Do not plant any other rotational food crops for 30 days after the last application of ET.</li> <li>Do not allow livestock to graze in treated areas.</li> <li>Do not apply more than 2 fl oz/A for this use.</li> </ul>

<sup>\*</sup> use higher rates for hard to control weeds such as Canada thistle, field bindweed, and kochia

# **Postemergence Weed Control**

Apply to emerged weeds in cotton having less than 3 inches of barked stem **using hooded ground spray equipment only**. Use of nonhooded spray equipment may allow spray to contact non-barked stem and may cause girdling of plants, crop damage, and/or loss of yield. **ET** may be tank mixed with other labeled herbicides for broad spectrum weed control.

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

Crop	Rate and Spray Volume	Use Restrictions and Comments
	1 to 2 fl oz/A, in 20 to 30 gpa	<ul> <li>Apply using hooded spray equipment only to</li> </ul>
Cotton	using ground equipment	avoid crop damage.
	0.5 to 2 fl oz/A in tank mixtures	<ul> <li>Do not exceed 2 fl oz/A per season for this use</li> </ul>
	with other labeled herbicides	pattern.
	<u></u>	·

#### **Postemergence Layby**

For best results, use **ET** herbicide in tank mixtures with other labeled herbicides for control of annual or-perennial herbaceous broadleaf and grass weeds 4 inches or less in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. Tank mixtures may be applied as a late postemergence treatment when the cotton crop has attained an average height of 18 inches or more than 3 inches stem bark development at the base of the plant. **Avoid contact of the herbicide with desirable vegetation. ET** herbicide and tank mixtures may be used in place of tillage for weed control.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Cotton, (with 3" or more of barked stem)	Broadleaves and grass weed species	0.5 to 1.0 fl oz/A in tank mixture with other labeled herbicides	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Do not apply more than 1 fl oz/A per season with this use pattern.</li> <li>Allow a minimum of 30 days between preplant burndown application of ET herbicide and postemergence application.</li> <li>For crops not listed on this label, applications must be made at least 30 days prior to planting.</li> </ul>

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#### **Cotton Defoliation**

Apply ET as part of a complete cotton defoliation program. When applied as a foliar spray to cotton, ET provides fast, effective defoliation of cotton plants. Adequate defoliation is generally achieved within 7 to 14 days depending on weather conditions. ET may be applied alone to cotton that is very physiologically mature; however, under less than optimal conditions, the most consistent defoliation, boll opening, and regrowth control is achieved with tankmixes of ET and other approved defoliation products. ET may be tank mixed or applied in sequence with other defoliant products such as Cottonquik®, Cyclone®, DEF® 6, Dropp® 50WP, Finish®, Folex® 6EC, Ginstar®, Gramoxone®, Prep™, or Roundup®.

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

Apply ET when sufficient mature bolls have developed to produce the desired yield (generally greater than 60%). Consult university recommendations for your region for testing of boll maturity. For best results apply ET in a tankmix combination with other products to achieve the desired result. Apply using aerial or ground equipment at the rates specified in the dosage table (below) for your area when conditions are favorable for defoliation. A repeat application may be made 7 days later, if required. Spray volume should be 20 to 30 gallons per acre for ground applications and at least 5 gallons per acre for aerial applications. Thorough coverage is essential for consistent results.

Crop	Rate and Spray Volume	Use Restrictions and Comments
Cotton	1.5 to 2.75 fl oz/A in 5 gallons water per acre by air or 20 to 30 gallons water per acre using ground equipment	<ul> <li>Do not exceed two applications or 5.5 fl oz/A for defoliation of cotton.</li> <li>Do not apply within 7 days of harvest.</li> </ul>

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#### CORN

#### **Preplant Burndown**

For best results, use ET herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. ET herbicide may be applied preplant burndown to control broadleaf weeds or in tank mixtures with other labeled herbicides for broad spectrum weed control (see below).

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 2.0%, is recommended for optimum control.

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

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Field Corn	Broadleaves and/or Grasses	0.5 to 2.0 fl oz/A plus other labeled herbicides in a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground*	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Treated areas may be replanted immediately with any crop listed on this label.</li> <li>Do not plant any other rotational food crops for 30 days after the last application of ET.</li> <li>Do not allow livestock to graze in treated areas.</li> <li>Do not apply more than 2 fl oz/A for this use.</li> </ul>

<sup>\*</sup> use higher rates for hard to control weeds such as Canada thistle, field bindweed, and kochia

#### Postemergence (not for use on sweet corn)

For best results, use **ET** herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. Use a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground. **ET** herbicide may be applied in-crop as an early postemergence treatment for control of broadleaf weeds, or in tank mixtures with other labeled herbicides such as phenoxy-based products or glyphosate for broad spectrum weed control (see below). See dosage table below for proper application timing.

Some temporary herbicidal symptoms such as leaf speckling or small discolored or necrotic spotting may appear on the crop, depending on environmental conditions, or if the crop is under stress. These effects are transient and will not affect crop yield.

Сгор	Pest	Rate/Acre	Use Restrictions and Comments
Corn (field corn, popcorn, seed corn, corn silage, corn stover)	Broadleaf Weeds	0.4 to 0.75 fl oz/A at the V1 to V2 stage of growth (approximately 6 inches tall)	<ul> <li>Do not apply postemergence to sweet corn.</li> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Do not apply more than 1 fl oz/A for this use.</li> <li>Do not apply more than 2 applications per season.</li> <li>Do not use crop oils or crop oil concentrates as adjuvants for postemergence application.</li> <li>Treated areas may be replanted immediately with any crop listed on this label. Do not plant any other rotational food crops for 30 days after the last application of ET.</li> <li>Do not allow livestock to graze in treated corn. Do not harvest corn for silage within 50 days after last application of ET. Do not harvest corn for grain or stover within 90 days of last ET application.</li> </ul>

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# DECIDUOUS FRUIT AND NUT TREES AND VINES

(Dormant, Prebloom, and Postharvest Applications)

[dates, feijoa, figs, grapes, kiwi fruit, mango, olives, persimmons, pome fruit, pomegranates, stone fruit, and tree nuts] (excluding citrus)

ET may be applied as a preplant burndown treatment for control of emerged winter annual and summer annual broadleaf weeds and burndown or suppression of certain perennial broadleaf weeds during the dormant period prior to bloom. ET should be tank mixed with one or more labeled herbicides for broad spectrum weed control. ET should be applied to emerged weeds less than 4" in height or rosettes less than 3" in diameter. Thorough coverage of target weeds is essential for optimum performance.

If using **ET** in a water source of = pH 7.5, use an approved agricultural buffering agent buffering to pH 7.5 or less.

Addition of a crop oil concentrate (COC) or nonionic surfactant is recommended for optimum control. Follow manufacturer's recommended use rates.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Dates Feijoa Figs Grapes Kiwi Fruit Mango Olives Persimmons Pome Fruit Pomegranates Stone Fruit Tree Nuts	Winter annual weeds and/or grassy weeds	0.5 to 2.0 fl oz/A plus other labeled herbicides in a minimum of 10 gallons water per acre in a broadcast or band directed application	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Do not make more than 3 applications or exceed 5.5 fl oz/A during the growing season.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Do not allow spray to contact green bark of trunk area on young grape vines and fruit or nut trees.</li> </ul>

# Nonbearing Deciduous Fruit And Nut Trees And Vines (excluding citrus)

For best results, apply ET Herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for adequate control.

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 2.0%, is recommended for optimum control.

Crop	Pest	Rate/Acre	Comments and Restrictions
Nonbearing tree fruit, nut, and vine crops	Control of annual grasses and/or broadleaf weeds	0.5 to 2.0 fl oz/A plus other labeled herbicides	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Do not make more than 3 applications or exceed 5.5 fl oz/A during the growing season.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Do not harvest edible crops for 12 months following application.</li> <li>Addition of labeled residual herbicides to extend weed control is permissible.</li> <li>Do not allow livestock to graze in treated areas.</li> </ul>

#### **FALLOW BEDS**

### **Preplant Fallow Beds and Crop Stubble**

This product may be applied preplant to fallowland in preparation for planting or postharvest to crop stubble. Preplant applications may be made prior to planting during the fallow period for any crop listed on this label. For crops not listed on this label, applications must be made at least 30 days prior to planting.

For best results, use ET herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. ET herbicide may be applied after the harvest of any crop to control late emerging broadleaf weeds or in tank mixtures with other labeled herbicides for broad spectrum weed control.

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 2.0%, is recommended for optimum control.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Preplant fallowbeds and crop stubble	Broadleaves and/or Grasses	0.5 to 2.0 fl oz/A plus other labeled herbicides in a minimum of 10 gallons water per acre*	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Do not make more than 3 applications or exceed 5.5 fl oz/A during the fallow period.</li> </ul>
			<ul> <li>Allow a minimum of 30 days between applications.</li> <li>For crops not listed on this label, applications must be made at least 30 days prior to planting.</li> <li>Do not allow livestock to graze in treated areas.</li> </ul>

<sup>\*</sup> use higher rates for hard to control weeds such as Canada thistle, field bindweed, and kochia

# NONCROP LAND AND UNCULTIVATED AGRICULTURAL AREAS (nonfood producing)

ET herbicide may be used in tankmixes with other labeled herbicides for broad spectrum weed control in noncrop situations. For best results, use ET herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control.

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 2.0%, is recommended for optimum control.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Noncrop land and uncultivated agricultural areas	Broadleaves and/or Grasses	0.5 to 2.0 fl oz/A plus other labeled herbicides in a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground*	<ul> <li>Use the higher rates and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Do not make more than 3 applications or exceed 5.5 fl oz/A per year for this use.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Do not allow livestock to graze in treated areas.</li> </ul>

<sup>\*</sup> use higher rates for hard to control weeds such as Canada thistle, field bindweed, and kochia

# NONCROP WEED CONTROL (not for homeowner use)

For use in noncrop areas where control of weeds is desired, such as airports; commercial plants; storage and lumber yards; barrier strips and firebreaks; equipment areas; nurseries and ornamental plantings; sodfarms; Christmas trees and conifer plantation site preparation; established ornamental turf; railroad, roadside and utility rights-of-way; fuel tank farms and pumping stations; other similar industrial noncrop areas.

For applications to ornamental turf and plantings, do not allow people (other than the applicator) or pets on treatment area during application and until sprays have dried (refer to Nonagricultural Use Requirements box). Apply ET at rates specified in the dosage table below for control of broadleaf weeds. ET may be tank mixed with other herbicides for broad spectrum weed control. ET is a broadleaf contact herbicide. Avoid contact with desirable vegetation.

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 2.0%, is recommended for optimum control.

Use	Rate and Spray Volume	Use Restrictions and Comments
(See directions for use above for explanation of appropriate use sites)	0.5 to 2.75 fl oz/A in 20 to 40 gpa using ground or backpack or similar spray equipment	<ul> <li>Make 1 to 2 applications per season to noncrop areas using ground equipment.</li> <li>Do not exceed two applications or 5.5 fl oz/A per season for noncrop weed control.</li> </ul>

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## **PASTURE AND RANGELAND**

ET may be used to control undesirable broadleaf weeds in improved pastures. For best results, use ET herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. Use a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground. ET herbicide may be applied as an early postemergence treatment for control of broadleaf weeds, or in tank mixtures with other labeled herbicides such as phenoxy-based products for broad spectrum weed control (see below).

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 1.0%, is recommended for optimum control.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Pasture and rangeland	Broadleaf weeds	0.75 to 2.75 fl oz/A with up to 1% crop oil or other adjuvant	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 14 days between applications.</li> <li>Do not make more than two applications per season.</li> <li>Treated areas may be replanted immediately with any crop listed on this label. Do not plant any other rotational food crops for 30 days after the last application of ET.</li> </ul>
			<ul> <li>Livestock may graze treated areas as soon as sprays have dried.</li> <li>Do not apply more than 5.5 fl oz/A per season for this use.</li> </ul>



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#### POTATO DESICCATION

When applied as a foliar spray to potatoes in early stages of senescence, ET provides effective desiccation of potato foliage and vines, as well as control of troublesome late-season broadleaf weeds to facilitate tuber harvest. Adequate desiccation is generally achieved within 14 days after the initial treatment is applied. A repeat application of ET or another herbicide or desiccant may be needed under certain climatic conditions to ensure complete desiccation. Apply ET when the potato crop is in the early stages of natural senescence for best results. ET may be tank mixed or applied in sequence with other desiccant products such as diquat for improved desiccation.

Crop	Rate and Spray Volume	Use Restrictions and Comments
Potato (all varieties)	2.75 to 5.5 fl oz/A in 5 gpa by air or 20 to 50 gpa using ground equipment	<ul> <li>Make 1 to 2 applications using ground equipment at a minimum 7 day interval.</li> <li>Do not exceed two applications or 11 fl oz/A for potato desiccation.</li> <li>Do not apply within 7 days of harvest.</li> </ul>



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# ROOT AND TUBER VEGETABLES, LEAFY VEGETABLES, COLE CROPS, LEGUMES, FRUITING VEGETABLES, CUCURBITS, AND SMALL GRAINS (LIMITED TO PREPLANT BURNDOWN)

For best results, use **ET** herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control.

Addition of a crop oil concentrate (COC) or nonionic surfactant is recommended for optimum control. Use **nonionic surfactants** at a concentration of 0.25% and COC at a concentration of 1%. ET is a contact herbicide and thorough coverage of target weeds is essential for optimum performance.

If using ET in a water source of = pH 7.5, use of an approved agricultural buffering agent is recommended.

Crop	Rate and Spray Volume	Use Restrictions and Comments
Root and tuber vegetables Leafy vegetables Cole crops Legumes Fruiting vegetables Cucurbits Small grains	0.5 to 2.0 fl oz/A plus other labeled herbicides in a minimum of 10 gallons water per acre by ground	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Do not make more than 3 applications or exceed 5.5 fluid ounces per acre per crop year.</li> <li>Allow a minimum of 30 days between applications.</li> <li>For crops listed on this label, do not apply within 2 days of planting.</li> <li>Do not allow livestock to graze in treated areas.</li> </ul>

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#### SOYBEANS

#### **Preplant Burndown**

For best results, use **ET** herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. **ET** herbicide may be applied preplant burndown to control broadleaf weeds or in tank mixtures with other labeled herbicides for broad spectrum weed control (see below).

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 2.0%, is recommended for optimum control.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Soybeans	Broadleaves and/or Grasses	0.5 to 2.0 fl oz/A plus other labeled herbicides in a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground*	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Treated areas may be replanted immediately with any crop listed on this label.</li> <li>Do not plant any other rotational food crops for 30 days after the last application of ET.</li> <li>Do not allow livestock to graze in treated areas.</li> <li>Do not apply more than 2 fl oz/A for this use.</li> </ul>

<sup>\*</sup> use higher rates for hard to control weeds such as Canada thistle, field bindweed, and kochia

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#### **Postemergence**

For best results, use ET herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. Use a minimum of 5 gallons water per acre by ground. ET herbicide may be applied in-crop as an early postemergence treatment for control of broadleaf weeds, or in tank mixtures with other labeled herbicides such as phenoxy-based products or glyphosate for broad spectrum weed control (see below). See dosage table below for proper application timing.

Some temporary herbicidal symptoms such as leaf speckling or small discolored or necrotic spotting may appear on the crop, depending on environmental conditions, or if the crop is under stress. These effects are transient and will not affect crop yield.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Soybeans	Broadleaf Weeds	0.4 to 0.75 fl oz/A at emergence to V2 stage of growth	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Do not apply more than 1 fl oz/A for this use.</li> <li>Do not apply more than 2 applications per season.</li> <li>Do not use crop oils or crop oil concentrates as adjuvants for postemergence application.</li> <li>Treated areas may be replanted immediately with any crop listed on this label. Do not plant any other rotational food crops for 30 days after the last application of ET.</li> <li>Do not graze soybean forage or cut for for hay within 7 days of last ET application.</li> <li>Do not harvest soybeans within 70 days of last ET application.</li> </ul>

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#### WHEAT

#### **Preplant Burndown**

For best results, use ET herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. ET herbicide may be applied preplant burndown to control broadleaf weeds or in tank mixtures with other labeled herbicides for broad spectrum weed control (see below).

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% to 2.0%, is recommended for optimum control.

Crop	Pest	Rate/Acre	Use Restrictions and Comments
Wheat	Broadleaves and/or Grasses	0.5 to 1.0 fl oz/A plus other labeled herbicides in a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground*	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Treated areas may be replanted immediately with any crop listed on this label.</li> <li>Do not plant any other rotational food crops for 30 days after the last application of ET.</li> <li>Do not allow livestock to graze in treated areas.</li> <li>Do not apply more than 2 fl oz/A for this use.</li> </ul>

<sup>\*</sup> use higher rates for hard to control weeds such as Canada thistle, field bindweed, and kochia

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#### **Postemergence**

For best results, use ET herbicide for control of annual or perennial herbaceous broadleaf weeds less than 4" in height, or rosettes less than 3" in diameter. Thorough, uniform spray coverage is essential for good control. Use a minimum of 5 gallons water per acre by air or 10 gallons water per acre by ground. ET herbicide may be applied in-crop as an early postemergence treatment for control of broadleaf weeds, or in tank mixtures with other labeled herbicides such as phenoxy-based products or glyphosate for broad spectrum weed control (see below). See dosage table below for proper application timing.

Some temporary herbicidal symptoms such as leaf speckling or small discolored or necrotic spotting may appear on the crop, depending on environmental conditions, or if the crop is under stress. These effects are transient and will not affect crop yield. Use of spray tank adjuvants in the application may increase this crop response. The use of approved surfactants is recommended for enhanced weed control.

Addition of a spray tank adjuvant such as, but not limited to, nonionic surfactants, methylated seed oils, or crop oil concentrates, at a concentration of 0.5% is recommended for optimum control.

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

Use of ET with products containing bromoxynil may cause significant foliar injury.

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Crop	Pest	Rate/Acre	Use Restrictions and Comments
Spring wheat	Broadleaf Weeds	0.4 to 0.75 fl oz/A when wheat is 6-8 inches tall to stem elongation (jointing), prior to boot stage	<ul> <li>Use the higher rate and spray volumes for control of larger weeds (4" tall). Control may be reduced with weeds larger than 4 inches tall.</li> <li>Allow a minimum of 30 days between applications.</li> <li>Do not apply more than 1 fl oz/A for this use.</li> </ul>
Winter wheat	Broadleaf Weeds	0.5 to 1.0 fl oz/A when wheat is 6-8 inches tall to stem elongation (jointing), prior to boot stage	<ul> <li>Do not apply more than 2 applications per season.</li> <li>Treated areas may be replanted immediately with any crop listed on this label. Do not plant any other rotational food crops for 30 days after the last application of ET.</li> <li>Do not graze wheat within 7 days of last ET application. Do not harvest wheat for hay within 21 days of last ET application.</li> <li>Do not harvest wheat for grain within 60 days of last ET application.</li> </ul>

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#### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. **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:** DO NOT reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or incineration, or if allowed by state and 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.

**CONDITIONS:** The directions for use of this product are believed to be accurate and should be followed carefully. However, because of extreme weather and soil conditions, use methods and other factors beyond the control of Nichino America, Inc. (NAI), it is impossible for NAI to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks are assumed by the user or buyer.

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