



5-22-2003 1/8

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

OFFICE OF
PREVENTION, PESTICIDES
AND
TOXIC SUBSTANCES

Mrs. Marie Maks
4550 New Linden Hill Road
Suite 501
Wilmington, Delaware 19808

MAY 22 2003

Dear Mrs. Maks:

Subject: Label Revision Amendment - Additional Use On
Cotton And Non-Crop Sites And Revised Brand
Name
ET™ Herbicide/Defoliant
EPA Registration No. 71711-7
Your Amendment Application Submission Dated
May 5, 2003

The labeling, referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable and supercedes all previously accepted ones. A copy is enclosed for your records. Submit one (1) copy of your final printed labeling before you release the products for shipment.

Sincerely yours,

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

Enclosures

ACCEPTED

MAY 22 2003

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 71711-7

2/8
ET herbicide/defoliant
ETMAS-050503
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all crops

ET™ Herbicide/Defoliant

For Terrestrial Use as a Cotton Harvest Aid/Defoliant, Potato Harvest Aid/Desiccant,
for Preplant or Preemergence Burndown in Cotton, Field Corn, and Soybeans,
Postemergence Weed Control in Cotton, and for Noncrop Weed Control

Active Ingredients:

Pyraflufen ethyl (ethyl 2-chloro-5-(4-chloro-5-difluoromethoxy-1-
methyl-1H-pyrazol-3-yl)-4-fluorophenoxyacetate) **2.5%**

Other Ingredients: **97.5%**

Total: **100.0%**

Contains 0.208 lb. Pyraflufen ethyl per gallon (25 grams per liter)

EPA Reg. No. 71711-7

EPA Est. No.

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 style="list-style-type: none">• Call a doctor or poison control center immediately for treatment advice.• Have a person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person. Avoid alcohol.
If in eyes	<ul style="list-style-type: none">• 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.• Call a poison control center or doctor for treatment advice
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-348-5832 for emergency medical treatment information. In case of fire or spills, information may be obtained by calling 1-800-424-9300.	
NOTE TO PHYSICIAN	
Contains petroleum distillate – vomiting may cause aspiration pneumonia. Probable mucosal damage may contraindicate the use of gastric lavage.	

For product information use internet website www.nichino.net

See (back, side, inside) label for First Aid and Precautionary
Statements and attached booklet for complete Directions for Use

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

**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)

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.

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 70.240(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 contaminate water when disposing of equipment washwater or rinsate. Do not apply if rainfall is expected within one hour.

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.

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.

GENERAL INFORMATION

ET™ is designed for use as a harvest aid in cotton and potatoes, as a preplant or preemergence burndown in field corn, cotton and soybeans, postemergence broadleaf herbicide in cotton, and as a nonselective herbicide for control of broadleaf weeds in noncrop areas. The contents should be mixed in water, using sufficient volume to permit thorough coverage of crop foliage and stems and applied using broadcast spray techniques. ET is rainfast within one hour after application.

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

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
- Waterproof 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.

WEEDS CONTROLLED

The following weed species can be controlled by applications of product in the manner described below:

Morningglory, entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>	Tall waterhemp	<i>Amaranthus tuberculatus</i>
Morningglory, pitted	<i>Ipomoea lacunosa</i>	Pennsylvania smartweed	<i>Polygonum pensylvanicum</i>
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	Ladysthumb	<i>Polygonum persicaria</i>
Velvetleaf	<i>Abutilon theophrasti</i>	Wild buckwheat	<i>Polygonum convolvulus</i>
Redroot pigweed	<i>Amaranthus retroflexus</i>	Kochia	<i>Kochia scoparia</i>
Chickweed	<i>Stellaria media</i>	Black nightshade	<i>Solanum nigrum</i>
Bedstraw	<i>Galium aparine</i>	Wild mustard	<i>Brassica kaber</i>
Henbit	<i>Lamium amplexicaule</i>	Common purslane	<i>Portulaca oleracea</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>	Curly dock	<i>Rumex crispus</i>
Common ragweed	<i>Ambrosia artemisiifolia</i>	Annual sowthistle	<i>Sonchus oleraceus</i>
Cocklebur	<i>Xanthium pensylvanicum</i>	Common sunflower	<i>Heliantus annuus</i>
Lambsquarters	<i>Chenopodium album</i>	Hairy beggartick	<i>Bidens pilosa</i>
Prostrate knotweed	<i>Polygonum aviculare</i>	Hemp sesbania	<i>Sesbania exaltata</i>
Wild radish	<i>Raphanus raphanistrum</i>		

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 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.

TANK MIXTURES

ET may be applied as a tankmix or in sequential application with other harvest aid, fungicide, or insecticide products. Weather, crop conditions, or the presence or certain weeds, crop damaging insects, or diseases will indicate the inclusion of other pesticides in the defoliation or desiccation application. ET may be tank mixed or applied in sequence with other defoliant or desiccant products such as Cottonquik®, Cyclone®, DEF® 6, Diquat, Dropp® 50WP, Finish®, Folex® 6EC, Ginstar®, Gramoxone®, Prep™, Roundup®, or Starfire®. ET may also be tank mixed with various insecticides or fungicides. Read and follow all label directions for each tankmix product.

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 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.

APPLICATION AND DOSAGE

Cotton Defoliation

When applied as a foliar spray to cotton preharvest, ET provides fast, effective defoliation of cotton plants. Adequate defoliation is generally achieved within 7 to 14 days dependent on temperature and weather conditions. Apply ET when sufficient mature bolls have developed to produce the desired yield (generally 50% to 70%). Consult university recommendations for your region for testing of boll maturity. Apply using aerial or ground equipment at the rates specified in the dosage table (below) for your area when conditions are favorable for defoliation. If aerially applied, use fixed wing aircraft only. A repeat application may be made 7 days later, if required. Spray volume should be 20-30 gallons per acre for ground applications and **at least 5 gallons per acre for aerial applications.**

Cotton Variety	Rate and Spray Volume	Comments
Upland and stripper varieties	1.5 to 2 fl oz/A in 5 gpa by air or 20-30 gpa using ground equipment	Make 1 to 2 applications as needed for adequate defoliation. Do not exceed two applications, or 5.5 fl oz/A for defoliation of cotton.
Acala varieties	2.75 fl oz/A in 5 gpa by air or 20-30 gpa using ground equipment	

Postemergence Weed Control

Apply to emerged weeds in cotton **using hooded ground spray equipment only.** Use of nonhooded spray equipment may cause girdling of plants, crop damage, and/or loss of yield. ET may be tank mixed with other herbicides, such as glyphosate, for control of grassy weeds.

Crop	Rate and Spray Volume	Comments
Cotton	1 to 2 fl oz/A, in 20 to 30 gpa using ground equipment	Apply using hooded spray equipment only to avoid crop damage. Make only one postemergence application per season.
	0.5 to 1 fl oz/A in tank mixtures with glyphosate or other grass herbicide	

Preplant or Preemergence Burndown

For control of broadleaf weeds at planting or prior to crop emergence, apply as a broadcast or banded in 10 to 50 gallons of water per acre. **ET** may be tank mixed with other herbicides such as Roundup (glyphosate) for control of grassy weed species. If tank mixed with glyphosate, use the lower rate of 0.5 fl oz/A.

Crop	Rate and Spray Volume	Comments
Field Corn Cotton Soybeans	0.5 to 1 fl oz/A in tank mixtures with glyphosate or other grass herbicide in 10 to 50 gpa using ground equipment	Tank mixtures with other herbicides for control of grassy weeds is recommended. Use higher rate for larger weeds. Make only one preplant or preemergence burn-down application per season.

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 herbicides 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.

Crop	Rate and Spray Volume	Comments
Potato (all varieties)	2.75 to 5.5 fl oz/A in 20 to 50 gpa using ground equipment	Make 1 to 2 applications using ground equipment at a minimum 7 day interval. Do not exceed two applications or 11 fl oz/A for potato desiccation.

Noncrop Weed Control

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; established ornamental turf; railroad, roadside and utility rights-of-way; fuel tank farms and pumping stations; other similar industrial noncrop areas. Apply **ET** at rates specified in the dosage table below for control of broadleaf weeds. **ET** may be tank mixed with other broadleaf herbicides such as glyphosate for control of grassy weeds.

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

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 1 fl oz/acre to field corn or soybeans, prior to planting, or emergence of crop only.
- Do not apply within 7 days of harvesting cotton or potatoes.

ROTATIONAL CROP RESTRICTIONS

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

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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