



PM13 10182-96 File 10112

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

JAN 14 1994

Cheryl Bohenic  
ZENECA INC.  
ZENECA AG PRODUCTS  
New Murphy Road & Concord Pike - Box 751  
Wilmington, DE 1989705

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 07/28/93 in Response to PR Notice 93-7  
EPA Reg. No. 10182-96  
KARATE INSECTICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

**WHAT THIS ACCEPTANCE MEANS:**

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

**WHAT YOU NEED TO DO NEXT:**

Send EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.

**BEST AVAILABLE COPY**



Recycled/Recyclable  
Printed with SoyCandle ink on paper that  
contains at least 50% recycled fiber

20/12

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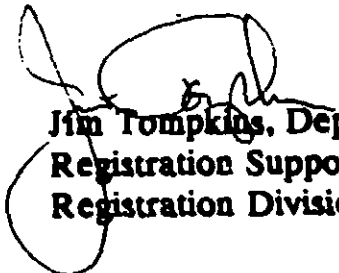
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

Attachment

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**RESTRICTED USE PESTICIDE**  
**Toxic to Fish and Aquatic Organisms**

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

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**KARATE® Insecticide**

**FOR USE TO CONTROL CERTAIN INSECTS ON COTTON**

**COMPLETE DIRECTIONS FOR USE**

EPA Reg. No. 10182-96  
EPA Est. No. 10182-

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

JAN 14 1994  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
10182-96

Made in U.S.A.  
ZENECA Ag Products  
ZENECA Inc.  
Wilmington, DE 19897

40412

**KEEP OUT OF REACH OF CHILDREN**

**DANGER  
PELIGRO**

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

**ACTIVE INGREDIENT:**

Lambda-cyhalothrin

[1 $\alpha$ (S\*),3 $\alpha$ (Z)]-( $\pm$ )-cyano-(3-phenoxyphenyl)methyl-

3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-

dimethylcyclopropanecarboxylate . . . . . 13.1%

**INERT INGREDIENTS:** . . . . . 86.9%

**Total** . . . . . 100.0%

KARATE contains 1 pound of active ingredient per gallon and is an emulsifiable concentrate.

**STATEMENT OF PRACTICAL TREATMENT**

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if irritation persists.

**IF SWALLOWED:** Do not induce vomiting. Call a physician immediately.

**IF INHALED:** Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**IF IN EYES:** Hold eyelids open and flush with steady, gentle stream of water. Remove any contact lenses and repeat flushing procedure for several minutes. Get medical attention if irritation persists.

**NOTE TO PHYSICIAN:** Induced vomiting as first aid for this substance may result in increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent. Vomiting should be induced only under professional supervision.

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**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D  
(327-8633).**

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC  
1-800-424-9300.**

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### DANGER

**CORROSIVE. CAUSES SKIN DAMAGE. MAY BE FATAL IF SWALLOWED OR INHALED. CAUSES EYE INJURY. HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC SKIN REACTIONS. DO NOT** get on skin, in eyes, or on clothing. **DO NOT** breathe spray mist. ~~WEAR a mask or pesticide respirator approved by NIOSH under the provisions of 30 CFR 11. WEAR goggles or face shield, protective clothing, and rubber gloves when mixing. WASH thoroughly with soap and water after handling and before eating, drinking, or using tobacco. REMOVE contaminated clothing and wash before reuse.~~

~~WEAR THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT WHEN HANDLING THE CONCENTRATE AND DURING APPLICATION, EQUIPMENT REPAIR, CLEANING, DISPOSAL OF THE SPRAY SOLUTION, AND DURING EARLY REENTRY TO TREATED AREAS.~~

~~Wear a protective suit of one or two pieces that covers all parts of the body except the head, hands, and feet. Wear chemical resistant gloves and chemical resistant boots, shoes, or shoe coverings. Wear goggles or face shield. A helmet with visor is acceptable during application from nonenclosed cockpits. Wear a pesticide respirator approved by the National Institute for Occupational Safety and Health under the provisions of 30 CFR 11.~~

~~During application only from a tractor with a completely enclosed cab or aurally with an enclosed cockpit, long sleeved shirt and long legged pants may be worn in place of the above protective equipment. Chemical resistant gloves must be made available in the cab or cockpit and must be worn while exiting. This clothing is inadequate to protect you during equipment repairs, equipment cleaning, spray solution disposal or early reentry.~~

**IMPORTANT!** ~~Before removing gloves, wash hands with soap and water. Always wash hands before smoking, eating, drinking, or toileting.~~

Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2 to 30 hours, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

~~HUMAN FLAGGERS IN THE TREATED AREA MUST EITHER BE IN TOTALLY ENCLOSED VEHICLES OR WEAR A PROTECTIVE SUIT, CHEMICAL RESISTANT GLOVES; A CHEMICAL RESISTANT HAT WITH A WIDE BRIM OR A HOOD; CHEMICAL RESISTANT SHOES, SHOE COVERS OR BOOTS; A RESPIRATORY PROTECTIVE DEVICE, AND A FACE SHIELD.~~

#### Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

**BEST AVAILABLE COPY**

Applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or viton  $\geq 14$  mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23G) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).
- For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

replaces existing  
respirator language on preceding page.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such 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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

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

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

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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.

This labeling must be in the possession of the user at the time of application.

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

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### 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 protection 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 24 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 over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or viton  $\geq$  14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

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**Resistance:** Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

### REENTRY STATEMENTS

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~~Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.~~

Apply KARATE® insecticide as shown in the following chart:

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### SPRAY RECOMMENDATIONS

Crop	Target Pests	Rate		Remarks
		lb ai/A	fl oz/A	
Cotton	Thrips Spp. Tobacco Thrips Soybean Thrips	0.01-0.02	1.28-2.56	<ul style="list-style-type: none"> <li>• Apply as required by scouting, usually at intervals of 5 to 7 days applications should be based upon insect populations reaching thresholds.</li> <li>• Apply with ground or air equipment using sufficient water to obtain adequate coverage.</li> <li>• Applications may also be made with equipment adapted and calibrated for use with KARATE. KARATE may be mixed with once-refined vegetable oil and applied at one quart of finished spray per acre.</li> <li>• Under light bollworm/budworm infestation levels, 0.02 lb ai/A may be used with intense field monitoring.</li> <li>• For boll weevil control spray on a 3 to 5 day schedule.</li> <li>• When applied according to label directions for control of cotton bollworm, KARATE insecticide also provides ovicidal control of unhatched eggs.</li> <li>• Do not apply within 21 days of harvest.</li> <li>• Do not graze livestock in treated areas.</li> <li>• Do not apply more than 1.6 pints (0.2 lb ai) per acre per season.</li> <li>• Do not make more than a total of 10 synthetic pyrethroid applications (including combination of products) to a cotton crop in one growing season.</li> <li>• Do not apply by ground within 25 feet, or by air within 75 feet of permanent streams, marshes or natural ponds; estuaries and coastal waters.</li> <li>• SPRAY DRIFT PRECAUTIONS <ul style="list-style-type: none"> <li>• All aerial and ground application equipment must be properly calibrated and equipped with appropriate carriers.</li> <li>• Do not make aerial or ground applications during temperature inversions.</li> <li>• Make aerial or ground applications when the wind velocity favors drift downwind (approximately 3 to 10 mph). Do not apply when wind velocity is less than 3 mph.</li> <li>• For aerial applications, the spray boom must be mounted on the aircraft in such a manner as to minimize drift caused by wingtip or rotor vortices. Boom length must not exceed 1/2 rotor diameter.</li> </ul> </li> </ul>
	Lygus Bugs Pink Bollworm Cabbage Looper Cotton Leafperforator Cutworm Spp. Saltmarsh Caterpillar Cotton Leafworm Cotton Fleahopper	0.02-0.03	2.56-3.84	
	Cotton Bollworm Tobacco Budworm Boll Weevil Fall Armyworm Beet Armyworm* European Corn Borer Brown Stink Bug Green Stink Bug Southern Green Stink Bug Twospotted Spider Mite** Cotton Aphid** Bandedwing Whitefly** Sweetpotato Whitefly**	0.025-0.04	3.20-5.12	

\* For control of the first and second instar only.  
\*\* Suppression only.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER DISPOSAL**

**Metal Containers:** Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

**Plastic Containers:** Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### **FOR BOOMERANG CONTAINERS**

**CONTAINER DISPOSAL:** Return container to ZENECA Inc. for reuse with seal intact and in salable condition.

#### **FOR BULK/MINI-BULK AND E-Z HANDLER® CONTAINERS**

#### **CONTAINER DISPOSAL**

**Plastic Containers:** Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

#### **CONTAINER PRECAUTIONS**

Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

**REFILL ONLY WITH KARATE INSECTICIDE.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than KARATE insecticide will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!**

**IMPORTANT:** Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

**CONDITIONS OF SALE AND LIMITED WARRANTY:**

The Directions for Use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller and Buyer and User assume the risk of any such use. **SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.**

When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The **EXCLUSIVE REMEDY OF BUYER OR USER** and the **LIMIT OF LIABILITY** of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. **SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.**

**AMBUSH®**, **CYMBUSH®**, **KARATE®** and **E-Z HANDLER®** are trademarks of ZENECA Group Companies.

**Ammo®**, **Capture®**, **Fury™**, and **Pounce®** are trademarks of FMC Corporation.

**Asana®** is a trademark of E. I. du Pont de Nemours & Co. (Inc.).

**Baythroid®** is a trademark of Mobay Corporation.

**Scout®** is a trademark of Hoechst-Roussel Agri-Vet Company.

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**RATE CONVERSION CHART**

<b>LB AI PER ACRE</b>	<b>FL OZ PER ACRE</b>	<b>PINTS PER ACRE</b>	<b>TREATED ACRES PER GALLON</b>
0.01	1.28	0.08	100
0.02	2.56	0.16	50
0.025	3.20	0.20	40
0.03	3.84	0.24	33
0.04	5.12	0.32	25