100-1097

10-19-2007



RESTRICTED USE PESTICIDE Due to Toxicity 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.

KARATE[®] INSECTICIDE WITH ZEON™ TECHNOLOGY EPA Reg. No. 100-1097

SUPPLEMENTAL DIRECTIONS FOR USE ON RICE; WILD RICE; CUCURBIT VEGETABLES; AND GRASS FORAGE, FODDER AND HAY

Active Ingredient:	
Lambda-cyhalothrin	· ·
$[1\alpha(S^*), 3\alpha(Z)]$ -(±)-cyano-(3-phenoxyphenyl)methyl-	
3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-	
dimethylcyclopropanecarboxylate	
Other Ingredients:	77.2%
Total:	100.0%

Karate Insecticide with Zeon Technology contains 2.08 lbs. of active ingredient per gallon and is a capsule suspension. Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN.

WARNING / AVISO

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

SCP 1097A-S3 0907

All applicable directions, restrictions and precautions on the EPA-registered label are to be followed.

Before using Karate Insecticide with Zeon Technology, as permitted according to this supplemental label, read and follow all applicable directions, restrictions, and precautions on the EPA registered label on or attached to the pesticide product container. This Supplemental Labeling contains revised use instructions and or restrictions that may be different from those that appear on the container label. This Supplemental Labeling supersedes the Directions for Use on the container label. This Supplemental Labeling must be in the possession of the user at the time of pesticide application. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

		RATE	
CROP	TARGET PESTS	lb. a.i./A	fl. oz./A
CEREAL GRAINS	r		
Rice Wild Rice	Bird Cherry-Oat Aphid Chinch Bug Fall Armyworm Grasshopper species Greenbug Leafhopper species Rice Stink Bug Rice Water Weevil (adult) Riceworm Sharpshooter species True Armyworm Yellow Sugarcane Aphid Yellowstriped Armyworm	0.025 - 0.04	1.6 - 2.56
	European Corn Borer ¹ Mexican Rice Borer ¹ Rice Seed Midge ¹ Rice Stalk Borer ¹ Sugarcane Borer ¹	0.03 - 0.04	1.92 – 2.56

DIRECTIONS FOR USE

Remarks

Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 lb. ai./acre, and treating 1200 acres (or more) per day must wear dust-mist respirator.

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- Apply as required by scouting. Timing and frequency of application should be based upon insect populations reaching locally determined economic thresholds. Determine the need for repeat applications, usually at intervals of 5 7 days, by scouting.
- Karate Insecticide with Zeon Technology can be safely used when propanil products are being used for weed control.
- Apply by air or by ground equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water (or total carrier volume) per acre, but ensure sufficient volume is used to provide adequate coverage. In addition, adding an emulsified crop oil (e.g., 1 pt. per acre) when lower aerial application volumes are used is recommended to help improve coverage, reduce evaporation and improve efficacy.
- For control of rice water weevil in dry-seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or feeding scars, usually within a time-frame of 0-5 days after permanent flood establishment. Do not exceed 10 days from starting permanent flood until insecticide application unless scouting indicates weevils have not been previously present. Adults may also be treated at later stages of rice development to reduce overwintering populations.
- For control of rice water weevil in water-seeded rice, make the first foliar application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars, usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment and, if needed, apply a second application within 7-10 days of the first application. Adults may also be treated at later stages of rice development to reduce overwintering populations.
- California: In addition to above directions for control of rice water weevil in water seeded rice, Karate Insecticide with Zeon Technology may be applied at the 1-3 leaf growth stage, with the majority at the 2 leaf growth stage. Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Monitor for adults, based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: a) spray the inside perimeter of the field, or b) spray the entire field.
- Greenbug is known to have many biotypes. Karate Insecticide with Zeon Technology may only provide suppression. If satisfactory control is not achieved with the first application of Karate Insecticide with Zeon Technology, a resistant biotype may be present. Use alternate chemistry for control.
- For control of stem borers, scout fields, when rice growth is near panicle differentiation, for early symptoms of damaging populations exhibited as discoloration (orange-tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of young larvae within the sheath. Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control. All rice varieties are susceptible to stem borer damage, but Cocodrie and Priscilla are particularly susceptible.
- Do not release flood water within 7 days of an application.
- Do not apply more than 0.12 lb. a.i. (7.68 fl. oz. or 0.48 pt. of product) per acre per season.
- Do not apply more than 0.04 lb. a.i. (2.56 fl. oz. or 0.16 pt. of product) per acre within 21 to 27 days of harvest.
- Do not apply within 21 days of harvest.
- **Do not** use treated rice fields for the aquaculture of edible fish and crustacea.
- Do not apply as an ultra-low volume (ULV) spray.

¹For control before the larvae bores into the plant stalk.

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	TARGET PESTS	RATE	
CROP		lb. a.i./A	fl. oz./A
CUCURBIT VEGETABLES			
Chayote (fruit) Chinese Waxgourd (Chinese preserving melon) Citron Melon Cucumber Gherkin Gourd (edible) <i>Lagenaria</i> species – includes: hyotan, cucuzza <i>Luffa acutangula</i> , <i>L. cylindrical</i> - includes: hechima, Chinese okra <i>Momordica</i> species – includes: balsam apple, balsam pear, bitter melon, Chinese cucumber Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i>) – includes: true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon Pumpkin Squash, summer (<i>Cucurbita</i>	Armyworm species ¹ Blister Beetle species Cabbage Looper Corn Earworm Cricket species Cucumber Beetle species (adults). Cutworm species Flea Beetle species Grasshopper species June Beetle species Leaffooted Bug Leafhopper species Lygus Bug species ¹ Melonworm Pickleworm Plant Bug species Rindworm species complex Saltmarsh Caterpillar Squash Beetle Squash Bug species Stink Bug species Thrips species ^{1, 2} Tobacco Budworm ¹ Webworm species	0.02-0.03	1.28-1.92
scallop squash, straightneck squash, vegetable marrow, zucchini Squash, winter (<i>Cucurbita</i> <i>maxima; C. moschata</i>) – includes butternut squash, calabaza, hubbard squash (<i>C. mixta; C. pepo</i>) - includes: acorn squash, spaghetti squash Watermelon – includes: hybrids and/or varieties of	Aphid species ¹ Leafminer species ^{1, 3} Whitefly species ^{1, 3} Spider Mite species ³	0.03	1.92
Citrulius Ianatus			

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Remarks

- Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.
- Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of all plant parts. When applying by air, apply in a minimum of 2 gal. total solution per acre. When applying by ground, a minimum of 10 gal. total solution per acre is recommended.
- Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual.
- Insects that bore or tunnel into leaves, vines, stems or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of Karate Insecticide with Zeon Technology.
- Do not apply more than 0.18 lb. a.i. (11.5 fl. oz. or 0.72 pts. of product) per acre per season.
 Do not apply within 1 day of harvest.

¹See **Resistance** statement under **General Directions for Use**.

²Does not include Western Flower Thrips ³Suppression only.

RATE CROP TARGET PESTS Ib. a.i./A fl. oz./A **GRASS FORAGE**, FODDER AND HAY Pasture and Rangeland Army Cutworm 0.015-0.025 0.96-1.6 Grass, Grass Grown for Cutworm species Hay or Silage and Grass Essex Skipper Range Caterpillar Grown for Seed Striped Grass Looper 0.02-0.03 1.28-1.92 Beet Armyworm Billbug species³ Bird Cherry-Oat Aphid¹ Black Grass Bug Black Turfgrass Beetle (adult) Blue Stem Midge Cereal Leaf Beetle Chinch Bug Crane Fly species Cricket species English Grain Aphid¹ Fall Armyworm Flea Beetle species Grass Mealybug Grass Sawfly (adult) Grasshopper species Green June Beetle (adult) Greenbug^{1, 2} Japanese Beetle (adult) Katydid species Leafhopper species Mite species³ Russian Wheat Aphid¹ Southern Armyworm Spittlebug species Stink Bug species Sugarcane Aphid Thrips species Tick species True Armyworm Webworm species Yellowstriped Armyworm

Remarks

- Apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.
- Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal. total solution per acre. When applying by ground, a minimum of 7 gal. total solution per acre is recommended.
- Use higher application volumes and rates when foliage is dense, pest populations are high, larvae are large and/or weather conditions are adverse. Use higher rates for longer residual.
- For chinch bug control, Karate Insecticide with Zeon Technology may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed.
- Greenbug is known to have many biotypes. Karate Insecticide with Zeon Technology may provide suppression only. In this situation, a second application using an alternative chemistry may be needed.
- Pasture and rangeland grass may be used for grazing or cut for forage 0 days after application. **Do not** cut grass to be dried and harvested for hay until 7 days after the last application.

Grass grown for seed:

- Straw, hay and mature seed (seed screenings) may be used as feed 7 days after the last application. Regrowth of grass grown for seed may be used for grazing, cut for forage or cut to be dried and harvested for hay.
- Do not apply more than 0.03 lb. a.i. (1.92 fl. oz. or 0.12 pts. of product) per acre per cutting for pastures, rangeland and grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03 lb. ai./A which have not been cut between applications.
- Do not apply more than 0.09 lb. a.i. (5.76 fl. oz. or 0.36 pts. of product) per acre per season.

¹Best control is obtained before insects begin to roll leaves. ²See **Resistance** statement under **General Directions for Use**. ³Suppression only.

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Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, North Carolina 27419-8300 www.syngenta-us.com

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