

Nichino America, Inc.

BUPROFEZIN 40SC Insect Growth Regulator

FOR Cotton, Cucurbits (including cucumbers, melons, pumpkins, squash), Lettuce, Snap Beans, Tomatoes, and Ornamentals (Greenhouse and Outdoor)

Marketing Brand: Courier 40SC

ACTIVE INGREDIENT:

Buprofezin: 2-tert-butylimino-3-isopropyl-5-phenylperhydro-1,3,5-thiadiazin-4-one 40.00%

OTHER INGREDIENTS: 60.00%

TOTAL 100.00%

Contains 3.6 lbs. buprofezin per U.S. gallon

EPA Reg. No. 71711-20

EPA Est. No.

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 to you in detail.)

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • 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. • Call a poison control center or doctor for treatment advice.
If on skin	<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.
HOT LINE 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: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

For product information use internet website www.nichino.net

Net Contents _____

Active Ingredient Made in Japan; Formulated and Packaged in U.S.A.

Nichino America, Inc.
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Wilmington, DE 19808
www.nichino.net

ACCEPTED
AUG 20 2004
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide Registered under EPA Reg. No. 71711-20

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING - AVISO

Causes substantial but temporary eye injury. Avoid contact with skin or clothing. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant (such as nitrile or butyl) gloves
- Protective eyewear
- Shoes plus socks

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.

User Safety Recommendations

Users should: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

ENGINEERING CONTROLS STATEMENT

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

For terrestrial uses, 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 contaminate water by cleaning of equipment or disposal of equipment washwaters.

IMPORTANT – Read the entire Directions for Use and Disclaimer of Warranties before using this product.

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 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 over long-sleeved shirt and long pants
- chemical-resistant (such as nitrile or butyl) gloves
- protective eyewear
- shoes plus socks

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 golf courses and other nonagricultural uses, do not enter treated areas without protective clothing until sprays have dried.

GENERAL INFORMATION

BUPROFEZIN 40SC insect growth regulator contains the active ingredient, buprofezin. It is effective against the nymph stages of whitefly, scales, mealybugs, planthoppers, and leafhoppers by inhibiting chitin biosynthesis, suppressing oviposition of adults, and reducing viability of eggs. Treated susceptible pests may remain alive on the plant for 3-7 days, but feeding damage during this time is typically very low. BUPROFEZIN 40SC is not disruptive to beneficial insects and mites.

Good coverage is essential. Apply by ground or air in sufficient water volume. Orient nozzles to assure good coverage. Use of higher volume of water will assure better coverage, especially under adverse conditions such as hot, dry weather, and/or a dense canopy. The entire field should be treated.

Apply when economic infestations occur based on local information.

BUPROFEZIN 40SC is not for sale, sale into, distribution, and or use in Nassau and Suffolk counties of New York state.

INSECTS CONTROLLED

Whiteflies: Silverleaf whitefly; Sweet potato whitefly; Greenhouse whitefly; Ash whitefly

Mealybugs: Grape mealybug; Vine mealybug; Citrus mealybug; Comstock mealybug; Longtailed mealybug; Mexican mealybug; Obscure mealybug

Leafhoppers and Planthoppers: Eastern grape leafhopper; Glassy-winged sharpshooter; Variegated leafhopper; Western grape leafhopper; Cherry leafhopper; Potato leafhopper; Brown planthopper

Scales:

Soft Scales: Citricola scale; Barnacle scale; Black scale; Brown soft scale; False oleander scale; Hemispherical scale; Indian wax scale and other wax scales; Tessellated scale; White peach scale

Armored Scales: Boisdouval scale; Cactus scale; California red scale; Coconut scale; Fern scale; Florida red scale; Oystershell scale; San Jose scale

Margarodid Scale: Cottony cushion scale

RESISTANCE MANAGEMENT

BUPROFEZIN 40SC belongs to a class of chemicals not previously used as pesticides and not known to be cross-resistant to other classes of insecticides. However, insect pests are known to develop resistance to products used repeatedly. Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies established for the crop and use area. Such strategies may include rotating with insecticides with different modes of action. Consult your local pest control advisor or extension office for details. If resistance to this product develops in your area, it may not provide adequate control. If you experience difficulty with control, and resistance is a likely cause, consult your local state university horticultural specialist or local agricultural authorities for the best alternative method of control. To preserve the usefulness of BUPROFEZIN 40SC, do not make more than two consecutive applications. Prior to subsequent applications, use an alternative chemistry with a different mode of action. If a different crop in an adjacent field has been treated with buprofezin for whitefly control within the past 28 days, do not apply again as the first whitefly application. Always consult your local crop advisor for the most appropriate control decision for your area. Resistance management strategies advise against applying rates lower than those recommended on the label.

For greenhouses: If another insect growth regulator with the mode of action as a chitin synthesis inhibitor (ie. cyromazine, diflubenzuron, and novaluron) has been used in the greenhouse within 28 days, do not apply BUPROFEZIN 40SC as the first whitefly application.

USE PRECAUTIONS

- Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground, unless otherwise specified in Directions for Use.
- **Crop Rotational Restrictions:** All crops listed on this label may be planted at any time. Small grain crops and leafy vegetables may be planted 30 days following application. All other crops may be planted 60 days following application.
- **For greenhouses:** Apply in a minimum of 20 gallons per acre. Be sure to apply in sufficient water to obtain complete coverage of all plant parts. Applications may be made with high volume, low volume, or ultra low volume (thermal and non-thermal foggers, misters, etc.) ground equipment. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.
- Do not apply this product through any type of irrigation system.

APPLICATION RATE CHART FOR BUPROFEZIN 40SC INSECT GROWTH REGULATOR

Crop	Pest	Formulated Product/A	Recommendations and Use Restrictions
Cotton	Whiteflies	9 to 12.5 fl oz	<ul style="list-style-type: none"> Do not apply within 21 days of harvest in California and 14 days outside California. Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details. Good coverage is essential. With ground application, use 10 to 50 gallons of water per acre. For aerial application, use a minimum of 5 gallons per acre. Orient nozzles to assure good coverage. Use of a higher volume of water will assure better coverage, especially under adverse conditions, such as hot, dry weather and/or a dense canopy. Use the higher application rate and spray volume when treating a rapidly increasing insect population. The entire field should be treated. Apply no more than two applications per season. Allow at least 28 days between applications.
Cucurbits (including cucumbers; melons (cantaloupe, honeydew melons, watermelons, musk- melons); pumpkins; squash)	Whiteflies	9 to 13.6 fl oz	<ul style="list-style-type: none"> Allow at least 7 days between applications to cucurbits. Do not apply within 7 days of harvest in cucumbers. Do not apply within 10 days of harvest in California and 7 days outside California in melons, pumpkins, and squash. Do not make more than 2 applications per crop cycle. Do not make more than 4 applications per year.
Lettuce (head and leaf)	Whiteflies	9 to 13.6 fl oz	<ul style="list-style-type: none"> Do not apply within 10 days of harvest in California and 7 days outside California. Allow at least 7 days between applications to lettuce. Do not make more than 2 applications per crop cycle. Do not make more than 4 applications per year.
Snap Beans	Whiteflies	9 to 13.6 fl oz	<ul style="list-style-type: none"> Allow at least 14 days between applications. Do not exceed 0.76 lb ai/A per crop cycle. Do not plant rotational crops other than those listed on this label for 120 days after the last application of BUPROFEZIN 40SC. Do not apply within 14 days of harvest.
Tomatoes	Leafhoppers Mealybugs Whiteflies	13.6 fl oz 13.6 fl oz 9 to 13.6 fl oz	<ul style="list-style-type: none"> Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details. Good coverage is essential. Apply in a minimum finished spray volume of 5 gallons per acre by air or 20 gallons per acre by ground to accommodate for the size of the tomato plants. Orient nozzles to assure better coverage. Use of a higher volume of water will assure better coverage, especially under adverse conditions, such as hot, dry weather and/or a dense canopy. The entire field should be treated. Apply no more than two applications per season. Allow at least 28 days between applications. Do not apply within 7 days of harvest. For greenhouse tomatoes, apply by ground on 2 acres as a minimum with 20 gallons water per acre. Apply in sufficient water to obtain complete coverage of all plant parts. Applications may be made with high volume, low volume or ultra low volume (thermal and non-thermal foggers, misters, etc.) ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.

<p>Ornamental plants in greenhouses; lath and shadehouses; nurseries; landscape ornamentals; ground covers; field- and container-grown ornamentals; non-bearing fruit and nut trees in nurseries; Christmas trees</p>	<p>Leafhoppers Mealybugs Scales Whiteflies</p>	<p>18 fl oz/100 gal 18 fl oz/100 gal 21.5 fl oz/100 gal 9 fl oz/100 gal</p>	<ul style="list-style-type: none"> ▪ Apply the specified dosage as a foliar spray in sufficient water for complete, uniform coverage, including stems and underside of leaves. Spray to the point of runoff. ▪ For whitefly or leafhopper control: Make first application as soon as adult insects begin to appear. For mealybug control: Make first application as soon as insect activity is observed. For scale control: Make first application when crawlers are emerging. ▪ If additional insecticide applications are required for control, use another class of chemistry or a different Insect Growth Regulator (IGR) with a different mode of action before making a second application of BUPROFEZIN 40SC. ▪ Make no more than 2 applications of BUPROFEZIN 40SC per year. ▪ Consult local or state agricultural authorities for details concerning economic thresholds for each target pest.
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STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

STORAGE: Store in original container, unopened, in a cool, dry place.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: DO NOT reuse empty container. 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 or local authorities, by burning. If burned, stay out of smoke.

IMPORTANT: READ BEFORE USE

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

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.

DISCLAIMER OF WARRANTIES: THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of NAI is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. NAI disclaims any liability whatsoever for incidental or consequential damages, including, but not limited to, liability arising out of breach of contract, express or implied warranty (including warranties of merchantability and fitness for a particular purpose), tort, negligence, strict liability, or otherwise.

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