

71711-20

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

CHEMICAL SAFETY
AND POLLUTION PREVENTION

OFFICE OF

December 07, 2012

Marie Maks
Nichino America, Inc
4550 New Linden Hill Road, Suite 501
Wilmington, DE 19808

Subject Application for Pesticide Amendment
 Buprofezin 40SC Insect Growth Regulator
 EPA Reg No 71711-20
 Your Submission Dated August 04, 2011
 Decision No 453807

Dear Ms Maks

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

If you have any questions contact Driss Benmhend at 703-308-9525 or by e-mail at Benmhend.driss@epa.gov

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Suarez", with a large, stylized flourish at the end.

Mark Suarez
Product Manager 13, Insecticide Branch
Registration Division (7504P)

Enclosure *Label stamped Accepted*

NICHINO AMERICA

GROUP 16 INSECTICIDE

BUPROFEZIN 40SC Insect Growth Regulator

ACTIVE INGREDIENT

Buprofezin 2 tert butylimino 3 isopropyl 5 phenyl 1 3 5 thiaziazinan 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 67545 AZ 1

Marketing Brands Courier® 40SC Insect Growth Regulator Courier® SC Insect Growth Regulator Talus® 40SC Insect Growth Regulator Centaur® SC Insect Growth Regulator

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

Formulated and Packaged in USA

Nichino America, Inc

4550 New Linden Hill Road Suite 501
Wilmington DE 19808
888 740 7700

ACCEPTED
DEC 07 2012

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

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 is effective against the nymphal stages of whiteflies scales mealybugs pear psylla planthoppers and leafhoppers by inhibiting chitin biosynthesis suppressing oviposition of adults and reducing viability of eggs BUPROFEZIN 40SC insect growth regulator is not an adulticide Evidence of activity may be slower than typical contact insecticides as treated susceptible pests may remain alive on the plant for 3-7 days however pests have stopped feeding and any feeding damage during this time is typically very low

BUPROFEZIN 40SC insect growth regulator is not disruptive to beneficial insects and mites

BUPROFEZIN 40SC insect growth regulator is a contact insecticide so good spray coverage is necessary 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 insect growth regulator is not for sale sale into distribution and or use in Nassau and Suffolk counties of New York State

INSECTS CONTROLLED

Whiteflies Ash whitefly Bandedwinged whitefly Greenhouse whitefly Silverleaf whitefly Sweetpotato whitefly

Mealybugs Citrus mealybug Comstock mealybug Gill's mealybug Grape mealybug Longtailed mealybug Mexican mealybug Obscure mealybug Striped mealybug Vine mealybug

Leafhoppers and Planthoppers Brown planthopper Cherry leafhopper Eastern grape leafhopper Glassy winged sharpshooter Potato leafhopper Variegated leafhopper Western grape leafhopper White apple leafhopper

Pear Psylla

Scales

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

Armored Scales Boissduval scale Cactus scale California red scale Coconut scale Fern scale Florida red scale Oystershell scale San Jose scale

Margarodid Scale Cottony cushion scale

USE RESTRICTIONS

- Do not apply this product through any type of irrigation system
- Crop Rotational Restrictions

CROP/CROP GROUP	PLANTBACK TIMING
All crops registered for use with buprofezin	0 days following application
Cereal grains	30 days following application
All other crops	60 days following application

RESISTANCE MANAGEMENT

BUPROFEZIN 40SC insect growth regulator is classified by IRAC in Group 16 – chitin biosynthesis inhibitors and is 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 insect growth regulator, do not make more than two consecutive applications. Prior to subsequent applications, use an alternative chemistry with a different mode of action. 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 biosynthesis inhibitor (i.e. cyromazine, diflubenzuron, and novaluron) has been used in the greenhouse within 28 days, do not apply BUPROFEZIN 40SC insect growth regulator as the first whitefly application.

APPLICATION DIRECTIONS

Applications should be made immediately after the spray solution is prepared. Thorough spray coverage is essential for effective control. Applications may be made with high or low volume spray equipment that provides thorough coverage of the plant. Apply with properly calibrated spray equipment. For best results, apply when pest populations are beginning to build, before reaching economic thresholds. Consult your local agricultural advisor or state cooperative extension service for recommendations.

MIXING DIRECTIONS

Shake well before using. Read and follow all label directions for each tank mix product prior to any tank mixing with BUPROFEZIN 40SC insect growth regulator. This product can be mixed with other registered pesticides for use on labeled crops or sites in accordance with the most restrictive use directions and

precautions No labeled dose rate should be exceeded BUPROFEZIN 40SC insect growth regulator cannot be mixed with any product containing a label prohibition against such mixing

BUPROFEZIN 40SC INSECT GROWTH REGULATOR ALONE Begin with clean equipment Fill spray tank with $\frac{3}{4}$ of the amount of water needed for the intended application and then turn on agitation Pour recommended amount of product on the surface of water in the spray tank Add the balance of the water to the spray tank with agitation running Keep agitation running during filling and spraying operations If spraying must be stopped before emptying the sprayer resume agitation before spraying the remainder of the load

BUPROFEZIN 40SC INSECT GROWTH REGULATOR TANK MIXTURES Follow all use directions as listed above under **BUPROFEZIN 40SC INSECT GROWTH REGULATOR ALONE** with the following exception after BUPROFEZIN 40SC insect growth regulator is thoroughly mixed and the tank is $\frac{3}{4}$ full add the recommended amount of wettable powder soluble powder flowable emulsifiable concentrate or soluble liquid product **while maintaining agitation** Then continue adding water to the tank to achieve the desired level while maintaining agitation

BUPROFEZIN 40SC INSECT GROWTH REGULATOR TANK MIXTURES WITH PRODUCTS IN WATER-SOLUBLE PACKAGING Follow all use directions as listed above under **BUPROFEZIN 40SC INSECT GROWTH REGULATOR ALONE** with the following exception add the desired number of water-soluble bags to the tank (if allowed by their label instructions) at the same time the BUPROFEZIN 40SC insect growth regulator is added **Note** If using products in water soluble packaging do not tank mix with products that contain boron chromium or other micronutrients

BUPROFEZIN 40SC insect growth regulator is physically and biologically compatible with many registered pesticides fertilizers or micronutrients Contact your supplier for advice when considering mixing BUPROFEZIN 40SC insect growth regulator with other pesticides fertilizers or micronutrients If you have no experience with the combination you are considering you should conduct a test to determine physical compatibility To determine physical compatibility add the recommended proportions of each chemical with the same proportion of water as will be present in the chemical supply tank into a suitable container mix thoroughly and allow to stand for five minutes If the combination remains mixed or can be readily re mixed the mixture is considered physically compatible

SPRAY DRIFT REDUCTION MANAGEMENT

Do not apply when wind speed favors drift beyond the area intended for treatment The interaction of many equipment and weather related factors determine the potential for spray drift The applicator is responsible for considering all of these factors when making application decisions Avoiding spray drift is the responsibility of the applicator

Importance of Droplet Size

An important factor influencing drift is droplet size Small droplets (<150 - 200 microns) drift to a greater extent than large droplets Within typical equipment specifications applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles In conditions of low humidity and high temperatures applicators should use a coarser droplet size

Ground Applications

Wind speed must be measured adjacent to the application site on the upwind side immediately prior to application For ground boom applications apply using a nozzle height of no more than 4 feet above the ground or crop canopy For airblast applications turn off outward pointing nozzles at row ends and when spraying the outer two (2) rows To minimize spray loss over the top in orchard applications spray must be directed into the canopy

Aerial Applications

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter. Flight speed and nozzle orientation must be considered in determining droplet size. Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a cross wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

Wind Speed Restrictions

Drift potential increases at wind velocities of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Only apply this product if the wind direction favors on target deposition. Do not apply when wind velocity exceeds 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions

Do not make ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by stable air and 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 mist or ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally near the ground surface in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

APPLICATION RATE CHART FOR BUPROFEZIN 40SC INSECT GROWTH REGULATOR

BEAN, SUCCULENT		
<p>Succulent forms of the following beans <i>Cicer arretinum</i> (chickpea garbanzo bean) <i>Lupinus</i> spp (including sweet lupine white sweet lupine white lupine and grain lupine) <i>Phaseolus</i> spp (including kidney bean lima bean mung bean navy bean pinto bean snap bean and waxbean) <i>Vicia faba</i> (broad bean fava bean) <i>Vigna</i> spp (including asparagus bean blackeyed pea and cowpea)</p>		
Pest	Rate/Acre	Notes and Use Restrictions
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use a minimum of 20 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Allow at least 14 days between applications • Do not apply more than 27.2 fl oz per acre per crop cycle • Do not make more than 2 applications per crop cycle • Pre Harvest Interval (PHI) 14 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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

COTTON		
Pest	Rate/Acre	Notes and Use Restrictions
Whiteflies	9.0 to 12.5 fl oz/acre (0.25 to 0.35 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use 10 to 50 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Do not make more than 2 applications per crop cycle • Allow at least 28 days between applications • Do not apply more than 24.9 fl oz per acre per crop cycle • Pre Harvest Interval (PHI) 14 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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

CUCURBIT VEGETABLES (CROP GROUP 9)		
Cucumbers Melons (Cantaloupe Honeydew melons Watermelons Muskmelons) Pumpkins Squash		
Pest	Rate/Acre	Notes and Use Restrictions
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use a minimum of 20 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Do not make more than 2 applications per crop cycle • Allow at least 7 days between applications • Do not apply more than 27.2 fl oz per acre per crop cycle • Do not make more than 4 applications per year • Pre Harvest Interval (PHI) 1 day <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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

FRUITING VEGETABLES (CROP GROUP 8-10)		
African eggplant Bush tomato Cocona Currant tomato Eggplant Garden huckleberry Goji berry Groundcherry Martynia Naranjilla Okra Pea eggplant Pepino Pepper (bell) Pepper (nonbell) Roselle Scarlet eggplant Sunberry Tomatillo Tomato Tree tomato cultivars varieties and/or hybrids of these		
Pest	Rate/Acre	Notes and Use Restrictions
Mealybugs	13.6 fl oz/acre (0.38 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use a minimum of 20 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Do not make more than 2 applications per crop cycle • Allow at least 5 days between applications • Do not apply more than 27.2 fl oz per acre per crop cycle • Pre Harvest Interval (PHI) 1 day • For Greenhouse tomatoes (<i>Talus only</i>) apply by ground on 2 acre minimum with 20 gallons of water per acre <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> • For Greenhouse tomatoes (<i>Talus only</i>) 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

BRASSICA (COLE) LEAFY VEGETABLES (CROP GROUP 5)

Broccoli broccoli Chinese (gai lon) broccoli raab (rapini) Brussels sprouts cabbage cabbage Chinese (bok choy) cabbage Chinese (napa) cabbage Chinese mustard(gai choy) cauliflower cavalo broccolo collards kale kohlrabi mizuna mustard greens mustard spinach rape greens

TURNIP TOPS or TURNIP GREENS

Broccoli raab (raab raab salad) hanover salad turnip tops (turnip greens)

Pest	Rate/Acre	Notes and Use Restrictions
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use a minimum of 20 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Do not make more than 2 applications per crop cycle • Allow at least 7 days between applications • Do not apply more than 27.2 fl oz per acre per crop cycle • Do not make more than 4 applications per year • Pre-Harvest Interval (PHI) 1 day <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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

LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES) (CROP GROUP 4)

Amaranth (Chinese spinach) arugula (roquette) cardoon celery celery Chinese celtuce chervil chrysanthemum edible-leaved chrysanthemum garland corn salad cress garden cress upland dandelion dock (sorrel) endive (escarole) fennel Florence lettuce head and leaf orach parsley purslane garden purslane winter radicchio (red chicory) rhubarb spinach spinach New Zealand spinach vine Swiss chard

Pest	Rate/Acre	Notes and Use Restrictions
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use a minimum of 20 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Do not make more than 2 applications per crop cycle • Allow at least 7 days between applications • Do not apply more than 27.2 fl oz per acre per crop cycle • Do not make more than 4 applications per year • Pre-Harvest Interval (PHI) 7 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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

LOW GROWING BERRY (CROP SUBGROUP 13 07G)		
Strawberry Bearberry Bilberry Blueberry (lowbush) Cloudberry Cranberry Lingonberry Muntries Partndgeberry		
Pest	Rate/Acre	Notes and Use Restrictions
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use a minimum of 80 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Do not make more than 2 applications per crop cycle • Do not apply more than 27.2 fl oz per acre per crop cycle • Allow at least 10 days between applications • Pre Harvest Interval (PHI) 3 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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

PEARS AND ASIAN PEARS - (Not For Use In California)		
Pest	Rate/Acre	Notes and Use Restrictions
Mealybugs Pear psylla Scales	53.7 to 71.6 fl oz/acre (1.5 to 2.0 lb ai/acre)	<p>NOT FOR USE IN CALIFORNIA</p> <ul style="list-style-type: none"> • Apply by ground application using a minimum of 100 gallons of water per acre • Do not make more than 2 applications per growing season • Allow at least 7 days between applications • Do not apply more than 107.4 fl oz (3.0 lbs ai) per acre per growing season • Pre-Harvest Interval (PHI) 14 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Pear psylla For best results of controlling 1st and 2nd instars apply pre-bloom or at petal fall In-season apply early when smaller pear psylla nymphs are present For best results tankmix with an adulticide • Mealybugs or San Jose scale Apply pre bloom or at first crawler emergence • Other scales Apply at first crawler emergence • Good spray coverage is essential • Phytotoxicity may occur in Asian pear varieties normally limited to applications made prior to petal fall

POME FRUITS (CROP GROUP 11-10) – EXCEPT PEARS and ASIAN PEARS (see Application Rate Chart for PEARS AND ASIAN PEARS)

(Not For Use In California)
 Apple Azarole Crabapple Loquat Mayhaw Quince Quince (Chinese) Quince (Japanese) Tejocote Cultivars varieties and/or hybrids of these

Pest	Rate/Acre	Notes and Use Restrictions
Leafhoppers	14.2 to 18.8 fl oz/acre (0.40 to 0.53 lb ai/acre)	<p>NOT FOR USE IN CALIFORNIA</p> <ul style="list-style-type: none"> • Apply by ground application using a minimum of 80 gallons of water per acre For low volume sprayers use a minimum of 20 gallons of water per acre • Do not make more than 1 application per growing season • Do not apply more than 53.7 fl oz (1.5 lbs ai) per acre per growing season • Pre Harvest Interval (PHI) 14 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • San Jose scale Application can be made at dormant delayed dormant pre-bloom or in season at early crawler emergence • Other scales Apply at early crawler emergence
Mealybugs Scales	53.7 fl oz/A (1.5 lbs ai/acre)	<ul style="list-style-type: none"> • Mealybugs Application should be made from dormant delayed dormant to petal fall when nymphs are present Apply in season at early crawler emergence • Good spray coverage is essential

STONE FRUIT (CROP GROUP 12) - (Not For Use In California)
 Apricot Cherry sweet Cherry tart Nectarine Peach Plum Plum chickasaw Plum damson Plum Japanese plumcot Prune (fresh)

Pest	Rate/Acre	Notes and Use Restrictions
Mealybugs Scales	53.7 fl oz/acre (1.5 lb ai/acre)	<p>NOT FOR USE IN CALIFORNIA</p> <ul style="list-style-type: none"> • Apply by ground application using a minimum of 50 gallons of water per acre • Do not make more than 2 applications per growing season • Allow at least 14 days between applications • Do not apply more than 107.4 fl oz (3.0 lbs ai) per acre per growing season • Pre-Harvest Interval (PHI) 14 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Mealybugs Application should be made when early crawler emergence occurs • San Jose scale Application can be made at dormant delayed dormant or pre-bloom when scale is in the black cap stage or in season at early crawler emergence • Other scales Apply at early crawler emergence • Good spray coverage is essential

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		
Pest	Dilution Rate fl oz/100 gallons	Notes and Use Restrictions
Leafhoppers Mealybugs Planthoppers	18.0 fl oz/100 gal (0.51 lb ai/100 gal)	<ul style="list-style-type: none"> Do not make more than 2 applications per year RECOMMENDATIONS <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.
Scales	21.5 fl oz/100 gal (0.60 lb ai/100 gal)	<ul style="list-style-type: none"> Leafhoppers, Planthoppers, Whiteflies Make first application as soon as adult insects begin to appear. Mealybugs Make first application as soon as insect activity is observed. Scales 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 insect growth regulator. Consult local or state agricultural authorities for details concerning economic thresholds for each target pest.
Whiteflies	9.0 fl oz/100 gal (0.25 lb ai/100 gal)	

STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage and disposal

PESTICIDE STORAGE Store in original container unopened in a cool dry place

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

CONTAINER HANDLING Nonrefillable container DO NOT reuse or refill this container Triple rinse (or equivalent) promptly after emptying Triple rinse as follows Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container ¼ full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times Then offer for recycling if available or reconditioning if appropriate 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 must 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 To the extent consistent with applicable law all such risks are assumed by the user or buyer

DISCLAIMER OF WARRANTIES TO THE EXTENT CONSISTENT WITH APPLICABLE LAW 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 To the extent consistent with applicable law 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

LIMITATIONS OF LIABILITY TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT WARRANTY TORT NEGLIGENCE STRICT LIABILITY OR OTHERWISE SHALL NOT EXCEED THE PURCHASE PRICE PAID OR AT THE ELECTION OF NICHINO AMERICA THE REPLACEMENT OF PRODUCT

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SUPPLEMENTAL LABEL

GROUP 16 INSECTICIDE

Courier® SC Insect Growth Regulator
EPA Reg No 71711-20

For Use on Succulent Beans

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling and the EPA approved container label must be in the possession of the user at the time of application.

New use directions appear on this supplemental labeling that supersede the Section 3 container label.

NOTICE Before using this product read the First Aid Precautionary Statements Conditions of Sale and Warranty and complete Directions for Use found on the container labeling All applicable directions restrictions and precautions on the EPA registered label are to be followed.

APPLICATION RATE CHART

BEANS, SUCCULENT		
Succulent forms of the following beans <i>Cicer arietinum</i> (chickpea garbanzo bean) <i>Lupinus</i> spp (including sweet lupine white sweet lupine white lupine and grain lupine) <i>Phaseolus</i> spp (including kidney bean lima bean mung bean navy bean pinto bean snap bean and waxbean) <i>Vicia faba</i> (broad bean fava bean) <i>Vigna</i> spp (including asparagus bean blackeyed pea and cowpea)		
Pests	Rate/Acre	Notes and Use Restrictions
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> For ground application use a minimum of 20 gallons of water per acre For aerial application use a minimum of 5 gallons of water per acre Allow at least 14 days between applications Do not apply more than 27.2 fl oz per acre per crop cycle Do not apply within 14 days of harvest <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> Treatment should be applied when nymphal population level reaches economic threshold Good coverage is essential 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

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Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for the
pesticide registered under

EPA Reg No 71711-20

16/16

SUPPLEMENTAL LABEL

GROUP 16 INSECTICIDE

Courier® SC Insect Growth Regulator
EPA Reg No 71711 20

For Use on Leafy Vegetables (except Brassica Vegetables)

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This labeling and the EPA approved container label must be in the possession of the user at the time of application.

New use directions appear on this supplemental labeling that supersede the Section 3 container label.

NOTICE Before using this product read the First Aid Precautionary Statements Conditions of Sale and Warranty and complete Directions for Use found on the container labeling All applicable directions restrictions and precautions on the EPA registered label are to be followed.

APPLICATION RATE CHART

LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES) (CROP GROUP 4)		
Amaranth (Chinese spinach) arugula (roquette) cardoon celery Chinese celtuce chervil chrysanthemum edible leaved chrysanthemum garland corn salad cress garden cress upland dandelion dock (sorrel) endive (escarole) fennel Florence lettuce head and leaf orach parsley purslane garden purslane winter radicchio (red chicory) rhubarb spinach spinach New Zealand spinach vine Swiss chard		
Pest	Rate/Acre	Notes and Use Restrictions
Leafhoppers Planthoppers Whiteflies	9.0 to 13.6 fl oz/acre (0.25 to 0.38 lb ai/acre)	<ul style="list-style-type: none"> • For ground application use a minimum of 20 gallons of water per acre • For aerial application use a minimum of 5 gallons of water per acre • Do not make more than 2 applications per crop cycle • Allow at least 7 days between applications • Do not apply more than 27.2 fl oz per acre per crop cycle • Do not make more than 4 applications per year • Pre-Harvest Interval (PHI) 7 days <p>RECOMMENDATIONS</p> <ul style="list-style-type: none"> • Treatment should be applied when nymphal population level reaches economic threshold • Good coverage is essential 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

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