

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

## NOTIFICATION NOV 2 8 2011

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Ms. Anna Armstring Nichino America, Inc. 4550 New Linden Hill Rd, Ste 501 Wilmington, DE 19808

NOV 28 2011

Subject:

Notification of alternate brand name

EPA Registration Number: 71711-21

Decision: 457102

Dear Ms. Armstrong

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration (PRN)98-10 dated October 14, 2011, for the abovementioned product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions regarding this letter, please contact Hulkower at (703) 603-0683.

Singerely

Mark Suarez

Product Manager 13 Insecticide Branch

Registration Division (7505P)

Enclosures:

Copy of Label Stamped "Notification"

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Please read instructions of	reverse before completing form.	Form A	Approved. OMB No. 207	0-0060	
<b>≎EPA</b>	United Star Environmental Prote Washington, Do	ction Agency	Registrati Amendme  X Other		
	Applic	ation for Pesticide - S	ection I		
1. Company/Product Numi Nichino America, Inc./7		2. EPA Product Mr. Mark Suare		3. Proposed Classification	
4. Company/Product (Nam Applaud 70DF Insect G	e) rowth Regulator	<b>PM#</b> 13		None Restricted	
Nichino America, Inc. 4550 New Linden Hill I	Applicant (Include ZIP Code) Rd, Suite 501, Wilmington, DE	(b)(i), my produ to: EPA Reg. No Product Nam	uct is similar or identic	ce with FIFRA Section 3(c)(3) al in composition and labeling	
		Section - II	ASSESSMENT OF THE PROPERTY OF		
Resubmission in re  Notification - Expla	sponse to Agency letter dated	Agency "Me To	inted labels in response to letter datedo" Application.  Explain below.	:0	
Material This Product V     Child-Resistant Packaging		Section - III	2. Type of Co	ontsiner	
Yes*  X No	Yes X No	Yes X No	Yes X No		
* Certification must be submitted	If "Yes" No. pe Unit Packaging wgt. Contain				
3. Location of Net Conten	Container 4. Size(s	e) Retail Container	5. Location of Label X On Label On Labelin	Directions g accompanying product	
6. Manner in Which Label	is Affixed to Product	aper glued tenciled	Other		
		Section - IV			
1. Contact Point /Comple	te items directly below for identif	ication of individual to be contact	ted, if necessary, to proc	ess this application.)	
Name Anna Armstrong		Title Manager, Reg. Affairs			
I certify that the sta I acknowledge that both under applicab	tements I have made on this form any knowingly false or misleading	tification n and all attachments thereto are g statement may be punishable b	true, accurate and coning	plete.  6. Dete Application Received (Stamped)	
2. Signature	و المحلق	3. Title  Manager, Reg. Affairs			
4. Typed Name Anna Armstrong		5. Date 0d 26, 201	5. Date 0 & 26, 201\		



October 26, 2011

Mr. Mark Suarez (PM-13)
Office of Pesticide Programs (7504-C)
Registration Division –H7505C
U.S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

RE: Submission of Notification per PR Notice 98-10 – Alternate Brand Name "Centaur® WDG Insect Growth Regulator" for Applaud® 70DF Insect Growth Regulator Master Label (EPA Reg. No 71711-21)

Dear Mr. Suarez:

Nichino America, Inc. herein submits the following in support of a label change Notification:

- Completed EPA Form 8570-1
- Notification Certification Statement (included immediately below)
- Eive copies of the amended label (D-94 102611) including one highlighted copy

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec 1001 to willfully make any false statements to the EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CRF 152.46, this product may be in violation of FIFRA, and I may be subject to enforcements action and penalties under sections 12 and 14 FIFRA.

The following details the changes to the label:

Addition of alternate brand name: Centaur® WDG Insect Growth Regulator

Thank you in advance for your efforts. If you have any questions, please do not hesitate to contact me at (302) 636-9001, extension 227 or by e-mail me at <a href="mailto:aarmstrong@nichino.net">aarmstrong@nichino.net</a>.

Sincerely,

Anna Armstrong

Manager, Regulatory Affairs

**Enclosures** 

GROUP 16 INSECTICIDE



# NOTIFICATION NOV 2 8 2011

# **APPLAUD® 70DF Insect Growth Regulator**

**ACTIVE INGREDIENT:** 

OTHER INGREDIENTS: 30.00%

DTAL 100.00%

Contains 0.70 lbs. buprofezin per pound of product

EPA Reg. No. 71711-21 EPA Est. No. 67545-AZ-1

Marketing Brands: Applaud<sup>®</sup> Insect Growth Regulator, Centaur<sup>®</sup> WDG Insect Growth Regulator, and Talus® 70DF Insect Growth Regulator

# CAUTION

	FIRST AID
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance; then give artificial respiration preferably by mouth to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If in eyes	<ul> <li>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.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>

#### **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 an symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

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Active Ingredient Made in China; Formulated and Packaged in USA

#### Nichino America, Inc.

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

#### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans and Domestic Animals**

### CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Waterproof gloves
- 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 hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### **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
- Waterproof gloves
- Socks and chemical-resistant footwear

#### 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**

APPLAUD® 70DF insect growth regulator is effective against the nymphal stages of whitefly, scales, psylla, mealybugs, planthoppers, and leafhoppers by inhibiting chitin biosynthesis, suppressing oviposition of adults, and reducing viability of eggs. APPLAUD 70DF 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.

APPLAUD 70DF insect growth regulator is not disruptive to beneficial insects and mites.

APPLAUD 70DF 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.

APPLAUD 70DF 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, Banded wing whitefly, Greenhouse whitefly, Silverleaf whitefly, Sweet potato whitefly

<u>Mealybugs:</u> Citrus mealybug, Comstock mealybug, Gill's mealybug, Grape mealybug, Longtailed mealybug, Mexican mealybug, Obscure mealybug, Striped mealybug, Vine mealybug

<u>Leafhoppers and Planthoppers</u>: Brown planthopper, Cherry leafhopper, Eastern grape leafhopper, Glassy-winged sharpshooter, Potato leafhopper, Variegated leafhopper, Western grape leafhopper, White apple leafhopper

#### Pear Psylla

#### Scales:

<u>Soft Scales</u>: 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

<u>Armored Scales</u>: Boisduval 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

APPLAUD 70DF 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 APPLAUD 70DF 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 same 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 APPLAUD 70DF insect growth regulator as the first whitefly application.

#### MIXING, LOADING, AND HANDLING INSTRUCTIONS

#### SPECIFIC MIXING INSTRUCTIONS

APPLAUD 70DF INSECT GROWTH REGULATORALONE: Fill spray tank with ¾ 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.

APPLAUD 70DF INSECT GROWTH REGULATOR TANK MIXTURES: Follow all use directions as listed above under APPLAUD 70DF INSECT GROWTH REGULATOR ALONE with the following exception: after the APPLAUD 70DF insect growth regulator is thoroughly mixed and the tank is ¾ full, add the recommended amount of wettable powder, soluble powder, flowable, emulsifiable concentrate, or soluble liquid product, while maintaining agitation. If a spray additive is needed, add a liquid fertilizer, surfactant, or crop oil concentrate to the spray tank at this time. Then continue adding water to the tank to achieve the desired level, while maintaining agitation.

APPLAUD 70DF INSECT GROWTH REGULATOR TANK MIXTURES WITH PRODUCTS IN WATER-SOLUBLE PACKAGING: Follow all use directions as listed above under APPLAUD 70DF 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 APPLAUD 70DF 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.

#### **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, state cooperative extension service, or regional Nichino America representative for recommendations.

#### **USE RESTRICTIONS**

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

PLANTBACK TIMING
0 days following application
30 days following application
60 days following application

#### **USE PRECAUTIONS**

- Apply in a minimum finished spray volume of 5 gallons per acre by air. For gallonage per acre by ground, refer to Application Rate Chart.
- Phytotoxicity may occur in Oriental Pear varieties, normally limited to applications made prior to petal fall.

## APPLICATION RATE CHART FOR APPLAUD 70DF INSECT GROWTH REGULATOR

Crop	Pest	Formulated Product Rate/Acre	Directions for Use
Acerola	Scales	34.5 oz/acre	Limited to Florida, Hawaii, and Puerto Rico
Atemoya Avocado		(2.156 lbs/acre)	<ul> <li>Apply by ground application using a minimum of 80 gallons of water per acre.</li> </ul>
Biriba Cherimoya			<ul> <li>Do not make more than 2 applications per growing season.</li> </ul>
Custard apple		(1.5 lbs ai/acre)	Allow at least 14 days between applications.
Feijoa	Leafhoppers	9.0 to 12.0 oz/acre	<ul> <li>Do not apply more than 69.0 oz (4.3 lbs) per acre per growing season.</li> </ul>
Guava Ilama	Mealybugs Whiteflies	(0.56 to 0.75 lbs/acre)	Do not apply within 21 days of harvest.
Jaboticaba Passion fruit		(0.40 to 0.52 lbo	RECOMMENDATIONS
Soursop		(0.40 to 0.53 lbs ai/acre)	<ul> <li>Mealybugs: Application should be made when early crawler emergence occurs.</li> </ul>
Starfruit			Scales: Apply at early crawler emergence.
Sugar apple Wax jambu			Good spray coverage is essential.
Black sapote	Leafhoppers	9.0 to 12.0 oz/acre	Limited to Florida, Hawaii, and Puerto Rico
Canistel Mamey sapote	Mealybugs	(0.56 to 0.75 lb/acre)	Apply by ground application using a minimum of 80 gallons of water per acre.
Mango	Whiteflies	(0.40 to 0.53 lbs ai/acre)	Do not make more than 5 applications per growing season.
Papaya	la ai/acre)		Allow at least 14 days between applications.
Sapodilla Star apple		Do not apply more than 45.0 oz (2.8 lbs) per acre per growing season.	
			Do not apply within 3 days of harvest.
			RECOMMENDATIONS
	100		Mealybugs: Application should be made when early crawler emergence occurs.
			Scales: Apply at early crawler emergence.
			Good spray coverage is essential.
ALMONDS	Mealybugs	34.5 to 46.0 oz/acre	Apply by ground application using a minimum of 100 gallons of water per acre.
PISTACHIOS	lbs/acre)	(2.156 to 2.875	Do not make more than 1 application per growing season.
			Do not apply more than 46.0 oz (2.875 lbs) per acre per growing season.
		(1.5 to 2.0 lbs ai/acre)	Do not apply within 60 days of harvest.
			RECOMMENDATIONS
			Mealybugs: Application should be made when early crawler emergence occurs.

			<ul> <li>San Jose scale: Application can be made at dormant or delayed dormant when scale is in the black cap stage, or in-season at early crawler emergence.</li> <li>Other scales: Apply at early crawler emergence or when scales are at a susceptible early nymphal stage.</li> <li>Good spray coverage is essential.</li> </ul>
APPLES CRABAPPLE LOQUAT MAYHAW QUINCE	Leafhoppers	9.0 to 12.0 oz/acre (0.56 to 0.75 lb/acre) (0.40 to 0.53 lbs ai/acre)	<ul> <li>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.</li> <li>Do not make more than 1 application per growing season.</li> <li>Do not apply more than 34.5 oz (2.156 lbs) per acre per growing season.</li> </ul>
	Mealybugs Scales	34.5 oz/acre (2.156 lb/acres)	Do not apply within 14 days of harvest.  RECOMMENDATIONS
		(1.5 lbs ai/acre)	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.
			<ul> <li>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.</li> </ul>
BANANAS	Leafhoppers Mealybugs	7.0 oz/acre	Apply by ground application using a minimum of 15 gallons of water per acre.
	Scales Whiteflies	(0.438 lbs/acre)	<ul> <li>Do not make more than 4 applications per growing season.</li> </ul>
	vvriiteilles	(0.04 lbs = !/====)	Allow at least 14 days between applications.
		(0.31 lbs ai/acre)	Do not apply within 1 day of harvest.
			RECOMMENDATIONS
			<ul> <li>Treatment should be applied when population level reaches economic threshold. Consult local or State agricultural authorities for details.</li> </ul>
			Good spray 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.
CITRUS CROP GROUP 10:	Black scale California red	34.5 to 46.0 oz/acre	Apply by ground application using a minimum of 750 gallons of water per acre.
Calamondin	scale	(2.156 to 2.875	Do not make more than 2 applications per
Citrus citron	Citricola	lbs/acre)	growing season.
Citrus hybrids	scale		Allow at least 60 days between applications.
(includes chironja,	Cottony cushion	(1.5 to 2.0 lbs ai/acre)	Do not apply more than 92.0 oz (5.75 lbs) per acre per growing season.

tangelo, tangor)	scale		Do not apply within 3 days of harvest.
Clementine	Glassy-		
Grapefruit	winged	No.	RECOMMENDATIONS
Kumquat Lemon	sharpshoot er		<ul> <li>Application should be made when early crawler emergence occurs.</li> </ul>
Lime	Mealybugs		Good spray coverage is essential.
Mandarin			Social spray developed to decernical.
Orange, sour			
Orange, sweet			
Pummelo			A MILE TO A CONTRACT OF THE STATE OF THE STA
Satsuma mandarin			
Tangerine			
White sapote (Casimiroa spp.)			
COFFEE	Mealybugs Scales	23.0 oz/acre	<ul> <li>Apply by ground application using a minimum of 50 gallons of water per acre.</li> </ul>
		(1.43 lbs/acre)	<ul> <li>Do not make more than 4 applications per growing season.</li> </ul>
			Allow at least 14 days between applications.
	(1.0 lbs ai/acr	(1.0 lbs al/acre)	<ul> <li>Do not apply more than 91.0 oz (5.72 lbs) per acre per growing season.</li> </ul>
			Harvest on application date permitted (0 day PHI).
			RECOMMENDATIONS
			<ul> <li>Treatment should be applied when population level reaches economic threshold. Good spray coverage is essential.</li> </ul>
GRAPES	Leafhoppers Mealybugs	9.0 to 12.0 oz/acre (0.56 to 0.75 lb/acre)	<ul> <li>Apply by ground application using a minimum of 50 gallons of water per acre depending on the size of the grapevine canopy.</li> </ul>
			Do not make more than 2 applications per growing season.
		(0.40 to 0.53 lbs ai/acre)	Allow at least 14 days between applications.
			Do not apply more than 24.0 oz (1.5 lbs) per acre per growing season.
			Do not apply within 7 days of harvest.
			RECOMMENDATIONS
			Leafhoppers: Apply when majority of the population is at the early nymphal stage.
			Mealybugs: Application should be made when early crawler emergence occurs. Good spray coverage is essential. 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.

ORIENTAL PEAR	Pear psylla Scales	(2.156 to 2.875 lbs/acre)	80 gallons of water per acre. For larger, more mature trees, use a minimum of 200 gallons of water per acre.  • Do not make more than 2 applications per growing season.
PEAR	Mealybugs	34.5 to 46.0 oz/acre	Good spray coverage is essential. 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.      Apply by ground application using a minimum of
			RECOMMENDATIONS     Application should be made when early crawler emergence occurs.
		N. N.	<ul><li>acre per growing season.</li><li>Do not apply within 21 days of harvest.</li></ul>
		(1.5 to 2.0 lbs ai/acre)	<ul> <li>Allow at least 50 days between applications</li> <li>Do not apply more than 92.0 oz (5.75 lbs) per</li> </ul>
		(2.156 to 2.875 lbs/acre)	Do not make more than 2 applications per growing season.  Allow at least 50 days between applications.
OLIVES	Scales	34.5 to 46.0 oz/acre	Apply by ground application using a minimum of 200 gallons of water per acre
		Commence with the	Do not apply within 21 days of harvest.
SPANISH LIME		(1.5 lbs al/acre)	Do not apply more than 69.0 oz (4.3 lbs) per acre per growing season.
RAMBUTAN SPANISH LIME		(1.5 lbs ai/acre)	Allow at least 14 days between applications.
PULASAN		(2.156 lbs/acre)	Do not make more than 2 applications per growing season.
LONGAN	Scales	34.5 oz/acre	Apply by ground application using a minimum of 80 gallons per acre spray volume.
			<ul> <li>Good spray coverage is essential. 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.</li> </ul>
			<ul> <li>Mealybugs: Application should be made when early crawler emergence occurs.</li> </ul>
			RECOMMENDATIONS
			Do not apply within 30 days of harvest.
		(1.05 lbs ai/acre)	<ul> <li>Do not apply more than 24.0 oz (1.5 lbs) per acre per growing season.</li> </ul>
		(1.50 lb/acre)	50 gallons of water per acre depending on the size of the grapevine canopy.
	Mealybugs	24.0 oz/acre	CALIFORNIA AND ARIZONA ONLY     Apply by ground application using a minimum of

		(1.5 to 2.0 lbs ai/acre)	Allow at least 7 days between applications.
			Do not apply more than 69.0 oz (4.3 lbs) per acre per growing season.
			Do not apply within 14 days of harvest.
			RECOMMENDATIONS
			Pear Psylla: For best results of controlling 1 <sup>st</sup> and 2 <sup>nd</sup> instars, apply at dormant, delayed dormant to petal fall, before pear psylla egg hatch.
			<ul> <li>In-season apply early when smaller pear psylla nymphs are present. For best results, tankmix with an adulticide.</li> </ul>
			Mealybugs: Application should be made at dormant, delayed dormant to petal fall when nymphs are present. Apply in-season at early crawler emergence.
			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.
			Good spray coverage is essential.
			<ul> <li>Phytotoxicity may occur in Oriental Pear varieties normally limited to applications made prior to petal fall.</li> </ul>
STONE FRUIT CROP GROUP	Mealybugs Scales	34.5 to 46.0 oz/acre	Apply by ground application using a minimum of 80 gallons of water per acre.
12:	Galler	(2.156 to 2.875 lbs/acre)	Do not make more than 2 applications per growing season.
Apricot			Allow at least 14 days between applications.
Cherry, sweet Cherry, tart	100	(1.5 to 2.0 lbs ai/acre)	Do not apply more than 69.0 oz (4.3 lbs.) per acre per growing season.
Nectarine			Do not apply within 14 days of harvest.
Peach	/-		RECOMMENDATIONS
Plum	- 30	1.45	RECOMMENDATIONS  • Mealybugs: Application should be made when
Plum, Chickasaw			early crawler emergence occurs.
Plum, Damson Plum, Japanese Plumcot			San Jose scale: Application can be made at dormant, delayed dormant, or pre-bloom when the bloom is in the bloom when the
Prune (fresh)			scale is in the black cap stage, or in-season at early crawler emergence.
		2 4	Other scales: Apple at early crawler emergence
			Good spray coverage is essential.
POMEGRANATES	Whiteflies	12.0 to 34.5 oz/acre	Apply by ground application using a minimum of 50 gallons of water per acre.
		(0.75 to 2.156 lbs/acre)	Do not make more than 2 applications per growing season.
	State of the state of		Allow at least 14 days between applications.

	Mealybugs Scales	34.5 to 46.0 oz/acre	<ul> <li>Do not apply more than 69.0 oz (4.3 lbs) per acre per growing season.</li> </ul>
		(2.156 to 2.875 lbs/acre)	Do not apply within 14 days of harvest.
			RECOMMENDATIONS
		(1.5 to 2.0 lbs ai/acre)	Whiteflies: Apply at early nymph threshold.
			<ul> <li>Mealybugs: Application should be made when early crawler emergence occurs.</li> </ul>
			<ul> <li>San Jose scale: Application can be made at dormant, delayed dormant, pre-bloom or in- season at early crawler emergence.</li> </ul>
			Other scales: Apply at early crawler emergence
			Good spray coverage is essential.
GREENHOUSE TOMATOES	Leafhoppers Mealybugs	9.0 oz/acre	For greenhouse tomatoes, apply by ground on 2 acre minimum with 20 gallons of water per acre.
	Planthoppers	(0.56 lbs/acre)	Apply no more than 2 applications per growing cycle.
			Allow at least 5 days between applications.
		(0.40 lbs ai/acre)	<ul> <li>Do not apply more than 18.0 oz (1.12 lbs) per acre per growing cycle.</li> </ul>
			Do not apply within 1 day of harvest.
	Whiteflies	6.0 to 9.0 oz/acre	RECOMMENDATIONS
		(0.38 to 0.56 lbs/acre)	Treatment should be applied when population level reaches economic threshold. Consult local and state agricultural authorities for details.
		(0.26 to 0.40 lbs ai/acre)	<ul> <li>Apply in sufficient water to obtain complete coverage of all plant parts. Good coverage is essential.</li> </ul>
			<ul> <li>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.</li> </ul>
ORNAMENTAL PLANTS	Leafhoppers Mealybugs	12.0 oz/acre	Make no more than 2 applications per crop per growing season.
in greenhouses; lath and	Planthoppers	(0.75 lb/acre)	Do not apply more than 28.0 oz (1.76 lbs) per acre per growing cycle.
shadehouses; nurseries;		(0 E2 lbc ci/core)	RECOMMENDATIONS
landscape ornamentals;		(0.53 lbs ai/acre)	Applications may be made with high volume, lew volume or ultra-low volume (thannal and non-

ground covers; field-and	Scales	14.0 oz/acre	thermal foggers, misters, etc.) ground equipment only. Follow the spray equipment manufacturer's
container-grown ornamentals; non- bearing fruit and		(0.88 lb/acre)	directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's
nut trees and vines in nurseries;		(0.61 lbs ai/acre)	operator's manual, spray nozzle catalogs and/or your crop advisor for more information.
Christmas trees			<ul> <li>Apply the specified dosage as a foliar spray in sufficient water for complete, uniform coverage,</li> </ul>
	Whiteflies	6.0 oz/acre	including stems and underside of leaves. Spray to the point of runoff.
		(0.38 lb/acre)	<ul> <li>Whiteflies, Leafhoppers or Planthoppers:</li> <li>Make first application as soon as adult insects begin to appear.</li> </ul>
		(0.26 lbs ai/acre)	<ul> <li>Mealybugs: Make first application as soon as insect activity is observed.</li> </ul>
			<ul> <li>Scales: Make first application when crawlers are emerging.</li> </ul>
			<ul> <li>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 subsequent applications of buprofezin.</li> </ul>
			<ul> <li>Consult local or state agricultural authorities for details concerning economic thresholds for each target pest.</li> </ul>

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or 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 DISPOSAL:** 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, 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.

#### **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.

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