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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

MAR- 1 3 2013:

Ms. Marie A. Maks Nichino America 4550 New Linden Hill Road, Suite 501 Wilmington, DE 19808

Subject: Amended Labeling

NAI-2399-2® 5EC Miticide/Insecticide EPA Registration Number: 71711-40 Application Dated: November 15, 2012

Decision: 475811

Dear Ms. Maks

The label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A copy of the label has been placed in the file for the subject product.

If you have any questions, please contact Melody Banks on 703 305-5413 or via E-mail @ banks.melody@epa.gov.

A stamped copy of the product label is enclosed for your records.

Sincerely

Mark Suarez

Insecticide Branch Product Manager

Registration Division (7504P)

Enclosure: Stamped Copy of Product Label

GROUP 21A INSECTICIDE

# NAI-2399-2<sup>®</sup> 5EC miticide/insecticide

**ACTIVE INGREDIENT:** 

 $\textbf{Fenpyroximate:} \ \textit{tert}\text{-butyl}(E)\text{-}\alpha\text{-}(1,3\text{-dimethyl-5-phenoxypyrazol-4-ylmethyleneaminoxy})\text{-}$ 

Contains 0.4 lb. active ingredient per U.S. gallon \*Contains petroleum distillates.

EPA Reg. No. 71711-40

EPA Est. No.

Marketing Brands: FujiMite® II, Portal® XLO

# KEEP OUT OF REACH OF CHILDREN WARNING - AVISO

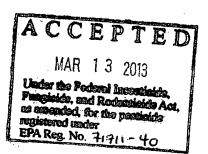
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

	FIRST AID
	Move the person to fresh air.
If inhaled .	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably mouth-to mouth, if possible.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
If in eyes	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
	Call a poison control center or doctor Immediately for treatment advice.
lf	Do not give any liquid to the person.
swallowed	• Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything by mouth to an unconscious person.
If on skin	Take off contaminated clothing.
or clothing	Rinse skin immediately with plenty of water for 15-20 minutes.
	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: May pose an aspiration pneumonia hazard. Contains petroleum distillates.

**NET CONTENTS:** 



Formulated and Packaged in U.S.A. for NICHINO AMERICA, INC. 4550 New Linden Hill Road Wilmington, DE 19808 1-888-740-7700

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# PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals WARNING - AVISO

May be fatal if inhaled. Causes substantial but temporary eye injury. Harmful if swallowed. Avoid contact with skin or clothing. Do not breathe spray mist. Remove and wash contaminated clothing and wash before reuse. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Barrier Laminate, Nitrile rubber, neoprene rubber, Viton, Selection Category E).

For handling activities, Wear respirator with an organic-vapor removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE pre-filter.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, or viton)
- Protective eyewear (such as safety glasses, goggles, or face shield)
- Shoes plus socks

For handling activities, use either a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. When handlers use closed systems *or* enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is very highly toxic to fish and aquatic invertebrates. 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. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

This chemical can contaminate surface water through spray applications. Under some conditions, it may also have a high potential for runoff into surface water after application. These include poorly drained or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

# **ENDANGERED SPECIES RESTRICTIONS**

This product may pose a hazard to endangered aquatic species. Leave a 75 foot untreated buffer between treatment area and fish-bearing waters. For citrus in Florida, with aerial applications, do not apply within 150 feet of any aquatic area. Follow all use directions.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

# **Minimum Honey Bee Toxicity**

Fenpyroximate is practically nontoxic to bees and wasps when fenpyroximate is applied to listed crops according to the label directions.

## 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 in your State 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 the 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 worn over short-sleeved shirt and short pants
- Socks
- Chemical-resistant footwear
- Protective eyewear (such as safety glasses, goggles, or face shield)
- Chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, or viton)

# **GENERAL INFORMATION**

NAI-2399-2 5EC miticide/insecticide is used for the control of leafhoppers, mealybugs, mites, psylla, psyllids, and whiteflies. NAI-2399-2 5EC miticide/insecticide stops mite feeding immediately after application. NAI-2399-2 5EC miticide/insecticide controls all motile stages of mites by inhibiting cellular

respiration in the mitochondrion of cells which results in rapid cessation of all biological activities including feeding and reproduction. Mortality of mites can be observed within 3-7 days after intoxication.

NAI-2399-2 5EC miticide/insecticide works primarily through contact action, so thorough spray coverage is necessary. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly. Treat plants when pests are immature or at a susceptible stage and populations are building, before crop damage occurs.

Targe	t Species
Apple rust mite (suppression only)	Pacific spider mite
Asian citrus psyllid	Pear psylla
Avocado Brown mite	Pear rust mite
Banks grass mite	Pecan leaf scorch mite
Broad mite	Persea mite
Carmine mite	Potato leafhopper
Citrus bud mite	Powdery Mildew (suppression only)
Citrus leafminer (suppression only)	Six spotted mite
Citrus red mite	Strawberry spider mite
Citrus rust mite	Texas citrus mite
Citrus thrips (suppression only)	Tomato (Potato) psyllid
Cyclamen mite	Tomato russet mite
European red mite	Two-spotted spider mite
Glassy-winged sharpshooter (suppression only)	Variegated leafhopper
Grape leafhopper	White apple leafhopper
McDaniel mite	Whiteflies
Mealybug species	Willamette spider mite
Mint bud mite	

# **APPLICATION DIRECTIONS**

- Applications should be made immediately after the spray solution is prepared.
- · Apply with properly calibrated spray equipment.
- Apply by ground or air using the recommended water spray volume found in the Directions for Use section of this label.
- For aerial equipment, use larger droplet size (greater than 200 microns).
- Thorough spray coverage is essential for mite and insect control.
- 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 further information.

# **USE OF ADJUVANTS**

When thorough coverage is a concern, it is recommended that a spray adjuvant be used to maximize uniformity of coverage and performance of NAI-2399-2 5EC. Use a non-ionic activator type wetting, spreading or penetrating adjuvant or horticultural spray oil adjuvant. Do not use a dormant oil, or binder or sticker-type adjuvant. Non-ionic adjuvants (NIS) should contain at least 75% surfactant. Crop oil concentrates (COC), methylated seed or vegetable oils (MSO), organosilicone products (OS), or blends of these adjuvants should contain at least 15% emulsifier/surfactant. Check compatibility of any adjuvant used with NAI-2399-2 5EC before using. Follow the Directions for Use on each adjuvant product label for rates of use and use restrictions.

### **APPLICATION RESTRICTIONS**

- Use by air is limited to cotton and citrus in Florida and Texas.
- Do not apply within 75 feet of fish-bearing waters.

- For aerial applications to citrus in the state of Florida, do not apply within 150 feet of any aquatic area.
- Do not plant rotational crops other than those listed on this label for 30 days following the last application of this product.
- Do not apply through any type of irrigation system.
- Do not apply by Alternate Row Middle (ARM) spray method.

#### RESISTANCE MANAGEMENT

Repeated use of the same chemistry has been shown to result in the buildup of resistant strains of mites or other insects. Do not use NAI-2399-2 5EC miticide/insecticide in successive miticide applications. Rotate the use of NAI-2399-2 5EC miticide/insecticide with alternate mode of action insecticides:

- Miticides must be rotated with alternate products for resistance management. Do not use products with the same mode of action [METI-2 inhibitor/IRAC Group 21A] in consecutive applications.

Consult your local crop advisor for the most appropriate alternative products. Resistance management strategies recommend that you DO NOT apply rates lower than recommended on the label.

#### MIXING DIRECTIONS

NAI-2399-2 5EC miticide/insecticide Alone: Shake well before using. Begin with clean equipment. 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.

NAI-2399-2 5EC miticide/insecticide Tank Mixtures: Shake well before using. Read and follow all label directions for each tank mix product prior to any tank mixing with NAI-2399-2 5EC miticide/insecticide. 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. Follow all use directions as listed above under NAI-2399-2 5EC miticide/insecticide Alone with the following exception: after the NAI-2399-2 5EC miticide/insecticide 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. Then continue adding water to the tank to achieve the desired level, while maintaining agitation.

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 MANAGEMENT

Avoid spray drift to all other crops and nontarget areas. Do not apply when weather conditions may cause drift. Do not allow this product to drift onto nontarget areas. Drift may result in illegal residues or injury to adjacent crops and vegetation. To avoid spray drift, DO NOT apply aerially when wind speed is greater than 10 mph or during periods of temperature inversions. Use of larger droplet size will also reduce spray drift.

# AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. Droplet size, boom height, and wind speed are the primary factors determining drift. The specific application conditions required for the use of this product are described below.

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# Controlling Droplet Size - General Techniques

#### Volume

Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

# **Pressure**

Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.

# **Nozzle Type**

Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

# **Controlling Droplet Size – Aircraft**

#### **Number of Nozzles**

Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

#### **Nozzle Orientation**

Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

# **Nozzle Type**

Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

# Boom Height and Length – Ground and Aircraft

**Boom Height (ground):** Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

**Boom Height (aircraft):** Application more than 10 feet above the canopy increases the potential for spray drift.

**Boom Length (aircraft):** The minimum boom length should not exceed ¾ of the wing length; using shorter booms decreases drift potential. For helicopters, the minimum boom length should not exceed 9/10 of the rotary blade to prevent droplets from entering the rotor vortices.

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. AVOID GUSTY OR WINDLESS CONDITIONS. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

# **Temperature and Humidity**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry. **Temperature Inversions** 

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. This cloud can move in unpredictable directions due to the light and variable winds common during inversions. Temperature inversions are characterized by 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 ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **Sensitive Areas**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### **Shielded Sprayers**

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with the uniform deposition of the product.

# Air Assisted (Air Blast) Field Crop Sprayers

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

# Air Assisted (Air Blast) Tree and Vine Sprayers

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides. In addition to the general drift management practices already described, the following specific practices will further reduce the potential for drift:

- Adjust the deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

# APPLICATION RATE CHART FOR NAI-2399-2 5EC MITICIDE/INSECTICIDE

# **MELONS (Crop Subgroup 9A)**

muskmelon, including hybrids and/or varieties of Cucumis melo (including true cantaloupe, cantaloupe, casaba, Santa Claus melon, crenshaw melon, honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon); citron melon; and watermelon, including hybrids and/or varieties of (Citrullus spp.)

Pest	Rate/Acre	Use Directions
Mites (see Target Species) Whiteflies	2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground application using a minimum of 20 gallons of water per acre.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply by air.</li> <li>Do not apply more than 4.0 pints per acre per crop cycle.</li> <li>Do not make more than 2 applications per crop cycle.</li> <li>Preharvest Interval (PHI): 3 days</li> </ul>

# LOW-GROWING BERRY (Crop Subgroup 13-07G)

bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries;

Pest	Rate/Acre	Use Directions
Mites (see Target Species) Whiteflies	1.0 to 2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground application using a minimum of 25 gallons of water per acre.</li> <li>Do not apply by air.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply more than 4.0 pints per acre per crop cycle.</li> <li>Do not make more than 2 applications per crop cycle.</li> <li>Allow 14 days between applications.</li> <li>Preharvest Interval (PHI): 1 day</li> </ul>

# WEST OF THE MISSISSIPPI RIVER

# NOTE:

- Temporary pinking of immature green berries may be observed after a NAI-2399-2 5EC application on certain strawberry varieties. This effect is transient and does not affect fruit sizing, color or quality.
- Avoid puddling of spray solution on plastic mulch as this can potentially result in underside scarring of fruit in direct contact with the plastic.

**CITRUS FRUITS (Crop Group 10)** 

calamondin; citron; citrus citron; citrus hybrids (includes chironja); grapefruit; kumquat; lemon; lime; mandarin (tangerine); orange, sour; orange, sweet; pummelo; satsuma mandarin; tangelo;

Pest	Rate/Acre	Use Directions
Asian citrus psyllid <sup>1</sup> Citrus rust mite	4.0 pints	USE RESTRICTIONS All geographies:  • Apply by ground using a minimum of 100 gallons of
Citrus thrips (suppression only) Citrus leafminer (suppression only) Leafhoppers Mealybugs Other Mites (see Target Species)	2.0 to 4.0 pints	<ul> <li>water per acre. For full size trees, use a minimum of 200 gallons of water per acre.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply by air except in Florida and Texas.</li> <li>In Florida and Texas, apply by air using a minimun of 10 gallons of water per acre.</li> <li>In Florida for citrus aerial applications, do not apply within 150 feet of any aquatic area.</li> <li>Do not apply more than 4.0 pints per acre per growing season.</li> <li>Do not make more than 2 applications per growing season.</li> <li>Allow 14 days between applications.</li> <li>Preharvest Interval (PHI): 14 days</li> <li>Do not apply to citrus nurseries or citrus in greenhouses.</li> <li>Do not apply through any type of irrigation system.</li> </ul>
		Use Permitted West of the Mississippi River:  • Do not apply more than 8.0 pints per acre per growing season.
	•	Do not apply by air except in Texas.

Pest	Rate/Acre	Use Directions
Mites (see Target Species)	Early season¹ (when cotton is less than 10-inches in height)  0.4 to 1.0 pints  Mid-season (when cotton is more than 10-inches in height)  1.0 pint by ground  1.0 to 2.0 pints by air	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 10 gallons of water per acre or by air using a minimum of 3 gallons of water per acre. As canopy density increases use of higher water volume will assure better coverage.</li> <li>Do not apply more than 2.0 pints per acre per growing season.</li> <li>Do not make more than 2 applications per growing season.</li> <li>Preharvest Interval (PHI): 14 days</li> <li>Do not apply through any type of irrigation system.</li> </ul>
Whiteflies	2.0 pints	-

For early season use, when cotton is less than 10 inches in height, NAI-2399-2 5EC Miticide/insecticide may also be applied as a directed spray using ground spray equipment.

FRUITING VEGETABLES (Crop Group 8)
(excluding cucurbits)

Pest	Rate/Acre	Use Directions
Mites (see Target Species) (Tomato) Potato Psyllid Whiteflies	2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 20 gallons of water per acre.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply more than 4.0 pints per acre per crop cycle.</li> <li>Do not make more than 2 applications per crop cycle.</li> <li>Preharvest Interval (PHI): 1 day</li> </ul>

<b>GREENHOUSE TOMATOE</b>	S	- 20
Pest	Rate/Acre	Use Directions
Mites (see Target Species)	2.0 pints	USE RESTRICTIONS  • Do not use products with the same mode of action
(Tomato) Potato Psyllid		in consecutive applications
Whiteflies		<ul> <li>Apply by ground using a minimum of 100 gallons of water per acre.</li> </ul>
	•	<ul> <li>Do not apply through any type of irrigation system.</li> </ul>
		<ul> <li>Do not apply more than 4.0 pints per acre per crop cycle.</li> </ul>
į		<ul> <li>Do not make more than 2 applications per growing season.</li> </ul>
		<ul> <li>Do not make more than 4 applications per year.</li> </ul>
		Allow 14 days between applications.
		Preharvest Interval (PHI): 1 day
		RECOMMENDATIONS
		<ul> <li>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.</li> </ul>

Pest	Rate/ Acre	Use Directions		
Mites	2.0 pints	USE RESTRICTIONS		
(see Target		Apply by ground using a minimum of 50 gallons of		
Species)		water per acre.		
Mealybugs		For vines with a heavy canopy, or in high pressure		
Powdery Mildew		situations, higher water volumes are recommende		
(suppression)		If lower water volume amounts are used, tractor		
Willamette spider		speed must be reduced to ensure complete		
mite	1.5 to 2.0 pints	coverage.		
		<ul> <li>Do not apply through any type of irrigation system.</li> </ul>		
Leafhoppers '	1.0 to 2.0 pints	Do not apply by air.		
		<ul> <li>Do not apply more than 2.0 pints per acre per</li> </ul>		
		growing season.		
		Do not make more than 2 applications per growing		
		season.		
		Preharvest Interval (PHI): 14 days		

HOPS				
Pest	Rate/ Acre	Use Directions		
Mites (see Target Species)	2.0 to 3.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 100 gallons of water per acre.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply by air.</li> <li>Do not apply more than 3.0 pints of product per acre per growing season.</li> <li>Do not apply more than 2 applications per season.</li> <li>Allow 14 days between applications.</li> <li>Preharvest Interval (PHI): 15 days</li> <li>RECOMMENDATIONS</li> <li>For best results, apply before mite populations exceed 5 mites per leaf.</li> </ul>		

# NOTE:

Leaf yellowing may occur when NAI-2399-2 5EC miticide/insecticide is combined with spray oil in excess of 1% of the spray volume. If this symptom occurs, it is usually more pronounced in newly expanding leaves. This symptom may occur in plants under stress and is worsened by certain conditions including the following:

- High Temperatures (air temperatures exceeding 90°F at the time of application or within a few days after application).
- Wet soil conditions and high humidity (rainy, misty, or foggy weather within a few days after application).
- Storm damage (including hail and wind).

MINT (peppermint, spearmint)			
Pest	Rate/Acre	Use Directions	
Mites (see Target Species)	1.0 to 2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 25 gallons of water per acre.</li> <li>Do not apply by air.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply more than 4.0 pints per acre per growing season.</li> <li>Do not make more than 2 applications per growing season.</li> <li>Allow 7 days between applications.</li> <li>Preharvest Interval (PHI): 1 day</li> </ul>	

Pest	Rate/Acre	Use Directions
Leafhoppers Mealybugs Mites (see Target Species)	1.0 to 2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 75 gallons of water per acre.</li> <li>Do not apply to citrus nurseries or citrus in greenhouses.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply more than 2.0 pints per acre per growing season.</li> <li>Do not make more than 2 applications per growing season.</li> <li>Allow 14 days between applications.</li> <li>Do not harvest edible crops for 12 months following application.</li> </ul>

NONBEARING DECIDUOUS FRUIT, NUT TREES, AND VINES		
Pest	Rate/Acre	Use Directions
Leafhoppers Mealybugs Mites (see Target Species)	2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 75 gallons of water per acre.</li> <li>Do not apply to citrus nurseries or citrus in greenhouses.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply more than 2.0 pints per acre per growing season.</li> <li>Do not make more than 1 application per growing season.</li> <li>Do not harvest edible crops for 12 months following application.</li> </ul>

ORNAMENTALS	Leafhoppers Mealybugs Mites (see Target Species)	1.0 to 2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 50 gallons of water per acre.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply more than 2.0 pints per acre per growing season.</li> <li>Allow 14 days between applications.</li> <li>Do not apply to citrus nurseries or citrus in greenhouses.</li> </ul>
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POME FRUITS (Crop Grou		Apr
Apple, crabapple; loquat; mayhaw; medlar, pear; quince		
Pest	Rate/Acre	Use Directions
Leafhoppers Mealybugs Mites (see Target Species)	1.0 pint	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 100 gallons of water per acre.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply by Alternate Row Middle (ARM) spray method.</li> <li>Do not apply by air.</li> <li>Do not apply more than 2.0 pints per acre per growing season.</li> <li>Do not make more than 2 applications per growing season.</li> <li>Preharvest Interval (PHI): 14 days</li> </ul>
Leafhoppers Mealybugs Mites (see <b>Target Species</b> ) Pear psylla	2.0 pints	<ul> <li>USE RESTRICTIONS</li> <li>Apply by ground using a minimum of 100 gallons of water per acre.</li> <li>Do not apply through any type of irrigation system.</li> <li>Do not apply by Alternate Row Middle (ARM) spray method.</li> <li>Do not apply by air.</li> <li>Do not apply more than 2.0 pints per acre per growing season.</li> <li>Do not make more than 1 application per growing season.</li> <li>Preharvest Interval (PHI): 14 days</li> </ul>

Pest	Rate/Acre	Use Directions
Mites (see Target Species)	1.5 to 4.0 pints	USE RESTRICTIONS WEST OF THE MISSISSIPPI RIVER  • Apply by ground using a minimum of 100 gallons of water per acre.  • Do not apply through any type of irrigation system.  • Do not apply by air.  • Do not apply more than 8.0 pints per acre per growing season.  • Do not make more than 2 applications per growing season.  • Allow 14 days between applications.  • Preharvest Interval (PHI): 14 days

TREE NUTS (Crop Group 14) (Use Permitted West of the Mississippi River) (excluding almonds and pistachios)

Beech nut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut); hickory nut;

macadamia nut; pecan; walnut, black and English

Pest	Rate/Acre	Use Directions
Mites (see Target Species)	1.5 to 4.0 pints	USE RESTRICTIONS WEST OF THE MISSISSIPPI RIVER  • Apply by ground using a minimum of 100 gallons of water per acre.  • Do not apply through any type of irrigation system.  • Do not apply by air.  • Do not apply more than 4.0 pints per acre
		<ul> <li>per growing season.</li> <li>Do not make more than 2 applications per growing season.</li> <li>Allow 14 days between applications.</li> <li>Preharvest Interval (PHI): 14 days</li> </ul>

TREE NUTS (Crop Group 14) (Use Permitted East of the Mississippi River Only)
Almond; beech nut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut); hickory nut; macadamia nut; pecan; pistachios; walnut, black and English

Pest	Rate/Acre	Use Directions
Mites	2.0 pints	USE RESTRICTIONS
(see Target Species)	·	EAST OF MISSISSIPPI RIVER
		<ul> <li>Apply by ground using a minimum of 100 gallons of water per acre.</li> </ul>
		<ul> <li>Do not apply through any type of irrigation system.</li> </ul>
		Do not apply by air.
		Do not apply more than 2.0 pints per acre per growing season.
		Do not make more than 1 application per growing season.
	,	Preharvest Interval (PHI): 14 days

# STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store 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:**

# (Non-refillable container equal to or less than 5 gallons)

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 ½ 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 or local authorities, by burning. If burned, stay out of smoke.

# (Non-refillable container greater than 5 gallons)

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple Rinse as follows: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. 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 and local authorities, by burning. If burned, stay out of smoke.

# (Refillable container greater than 5 gallons)

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Then offer for recycling if available 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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