**TOLFENPYRAD** 

GROUP **GROUP** 

21A 39

INSECTICIDE **FUNGICIDE** 



Broad spectrum insecticide that also controls eriophyid mites and certain fungal diseases

ACTIVE INGREDIENT:

**Tolfenpyrad:** 1H-Pyrazole-5-carboxamide,

85.0% OTHER INGREDIENTS:

TOTAL

Contains 1.34 lbs active ingredient per U.S. gallon

100.0% (E)

EPA Reg. No. 71711-36

EPA Est. No. 67545-AZ-1 70815-GA-001 39578-TX-1 superscript corresponds with lot number

## 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		
If inhaled	Move person to fresh air.     If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth, if possible.     Call a poison control center or doctor for further treatment advice.		
If swallowed	<ul> <li>Call a 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 a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
If in eyes	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 or clothing	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.		
HOTLINE NUMBER			

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For additional information on this pesticide product, including human health concerns and medical emergencies, call 1-800-348-5832.

See inside booklet for Precautionary Statements and Directions for Use

NICHINO Nichino America, Inc.

4550 Linden Hill Road, Suite 501 Wilmington, DE 19808

**NET CONTENTS: 2.5 gallons** 

101507 08/20

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING - AVISO

May be fatal if inhaled. Do not breathe vapor or spray mist. Harmful if swallowed or if absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

## Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear (goggles, face shield, or safety glasses)
- For handling activities, wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and a combination N, R, or P filter; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air-purifying respirator with OV cartridges and combination HE filters.

## See Engineering Controls.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **ENGINEERING CONTROLS**

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.

## **User Safety Recommendations**

Users should:

- Wash thoroughly with soap and water after handling and 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.
- Wash clothing and personal protective equipment (including both the inside and outside of gloves) before each
  day of reuse according to manufacturer's directions or, if no such directions exist, in detergent and hot water. Keep
  and wash PPE separately from other laundry.

#### **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. Do not apply when weather conditions favor drift from treated areas. 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 product is highly toxic to bees and other pollinating insects exposed to direct treatment or residues on blooming crops or weeds. **Do not apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are visiting the treatment area.** Application must be made at least 8 hours prior to bees foraging.

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having medium to high potential for reaching both surface water and aquatic sediment via runoff for several weeks after application. A level, well-maintained vegetative filter (buffer) strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this chemical from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

## PROTECTION OF POLLINATORS

APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

#### This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications or contact with residues on plant surfaces after foliar applications.
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When using this product, take steps to:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product onto beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

#### **ENDANGERED SPECIES RESTRICTIONS**

This product may pose a hazard to endangered aquatic species. Follow all use directions.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

## **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 state or tribal agency responsible for pesticide regulation.



#### 1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met. If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48 hours prior to the time of the planned application so that the bees can be removed, covered, or otherwise protected prior to spraying.



# 2. FOR FOOD CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset.
- The application is made to the target site when temperatures are below 55°F.
- The application is made in accordance with a government-initiated public health response.
- The application is made in accordance with an active state-administered apiary registry program where beekeepers
  are notified no less than 48 hours prior to the time of the planned application so that the bees can be removed,
  covered, or otherwise protected prior to spraying.
- The application is made due to an imminent threat of significant crop loss and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48 hours prior to the time of the planned application so that the bees can be removed, covered, or otherwise protected prior to spraying.

#### 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.

For early entry into 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, wear:

- Coveralls
- Waterproof gloves
- · Shoes plus socks
- Protective eyewear (goggles, face shield, or safety glasses)

## **USE INFORMATION**

APTA® Insecticide is a suspension concentrate containing 1.34 lbs of active ingredient tolfenpyrad per gallon. This product is a contact insecticide used for the control of several orders of insects. Complete and thorough spray coverage is necessary for maximum results. APTA Insecticide should be used in a program with other products to provide season long protection. Apply as a spray as directed in the Application Directions section of this label. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Adjust water volumes and tractor speed accordingly for crops with dense foliage or excessive growth. Unless otherwise specified under Application Directions, apply when pest populations are beginning to build, before crop damage or injury is observed. Consult your local agricultural advisor or state cooperative extension service for recommendations.

#### DIRECTIONS FOR USE OF APTA INSECTICIDE AS A FUNGICIDE

For crops and diseases where the level of activity of **APTA** Insecticide is listed as "control", this product may be used alone as a contact fungicide or mixed with other registered fungicide products to broaden spectrum of disease control. For crops and diseases where the level of activity of **APTA** Insecticide is listed as "suppression", this product should NOT be substituted for labeled fungicidal products.

#### APPLICATION DIRECTIONS

- Applications should be made immediately after the spray solution is prepared.
- Thorough spray coverage is critical to obtain control of the target pest(s).
- Applications may be made by ground with high or low volume spray equipment that provides thorough spray coverage of the plant.
- For ground applications, use coarse droplet size.
- For aerial applications, use larger droplet size (greater than 200 microns).
- Use sufficient water volume to ensure thorough coverage of foliage.

#### RESTRICTIONS

- Do not apply APTA Insecticide through any type of irrigation system.
- · Not for sale, sale into, distribution, and/or use in New York state.

#### **BUFFER ZONES**

Vegetative Filter (Buffer) Strip

All crops except Tree Nuts (Crop Group 14-12): 15-foot vegetative filter (buffer) strip

Tree Nuts (Crop Group 14-12): 25-foot vegetative filter (buffer) strip

Construct and maintain the vegetative filter (buffer) strip of grass or other permanent vegetation between field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds). Only apply products containing tolfenpyrad onto fields where a maintained vegetative filter (buffer) strip of at least 15 feet exists between the field edge and down gradient aquatic habitat. For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA. https://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs144p2\_030970.pdf.

## **Buffer Zone for Ground Application**

Do not apply within 15 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds).

## **Buffer Zone for Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish ponds.)

#### **SPRAY ADJUVANTS**

For maximum performance, the use of an agricultural spray adjuvant with **APTA** Insecticide is recommended to increase spray coverage of the plants and pests being treated. Select an adjuvant that is labeled for agricultural use and follow its use directions.

#### ROTATIONAL CROP RESTRICTIONS

Crop/Crop Group	Plantback Timing
All crops on this label	0 days following application
All other crops	14 days following application

#### RESISTANCE MANAGEMENT

For resistance management, **APTA** Insecticide contains a Group 21A insecticide. Any insecticide population may contain individuals naturally resistant to **APTA** Insecticide and other Group 21A insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of APTA Insecticide or other Group 21A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they
  may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, recordkeeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Nichino America representatives at 888-740-7700.

#### MIXING DIRECTIONS

Shake well before using. Read and follow all label directions for each tankmix product prior to any tank mixing with **APTA** 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. Do not exceed any labeled dose rate.

**APTA** Insecticide is physically and biologically compatible with many registered pesticides, fertilizers, or micronutrients. Contact your supplier for advice when considering mixing **APTA** Insecticide 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 remixed, the mixture is considered physically compatible.

**APTA Insecticide Alone:** 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 remaining water volume 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.

APTA Insecticide Tank Mixtures: It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Begin with clean equipment. Fill spray tank with ¾ of the amount of water needed for the intended application and turn on agitation. If using a buffering agent, add after filling the tank with ¾ amount of water.

Add the recommended amount of tankmix products in the following order while maintaining agitation:

- 1) products in water soluble packets
- 2) wettable powders
- 3) water dispersible granulars and/or soluble powders
- 4) flowable liquids (including **APTA** Insecticide)
- 5) emulsifiable concentrates
- 6) adjuvants and/or oils
- 7) remaining amount of water to achieve the desired level

#### COMPATIBILITY STATEMENT REGARDING CERTAIN FUNGICIDE PRODUCTS

**APTA** Insecticide has been found to be compatible in mixes with several different fungicide products and has been found to be safe to labeled crops under most conditions. However, care should be taken when applying **APTA** Insecticide in tankmixes with fungicide products in FRAC Group 3 (sterol biosynthesis inhibitors) and FRAC Group 11 (QoI) if environmental conditions are known to be conducive to adverse crop response to those products.

#### 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 and the grower are 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.

# 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.

## 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 must 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. In addition to the general drift management practices already described, the following specific practices will further reduce the potential for drift:

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- 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 APTA INSECTICIDE

Avocado			
Pest	Rate/Acre	Use Directions	
Ambrosia beetle Aphids Leafrollers Thrips, including avocado thrips	24.0 fl oz/acre (0.25 lb ai/acre)	<ul> <li>Apply by air using a minimum of 50 gallons of water per acre.</li> <li>Apply by ground using a minimum of 50 gallons of water per acre.</li> <li>USE RESTRICTIONS</li> <li>Do not make more than 3 applications per year.</li> <li>Allow at least 7 days between applications.</li> <li>Do not apply more than 72.0 fluid ounces (0.75 lb ai) per acre per year.</li> <li>Preharvest Interval (PHI): 1 day</li> </ul>	

Berry, Low Growing Group (Crop Subgroup 13-07G) excluding cranberry and blueberry, low bush bearberry; bilberry; cloudberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these

## **Bushberry Subgroup (Crop Subgroup 13-07B)**

aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these

Caneberry Subgroup (Crop Subgroup 13-07A)

Aphids Eriophyid mites Leafhoppers Leafrollers Lygus Powdery mildew Spotted wing drosophila*  27.0 fl oz/acre (0.28 lb ai/acre)  (2.25 days between applications per year.  (2.25 loon of water per acre.  (2.25 loon of water per	Pest/Disease	Rate/Acre	Use Directions
	Eriophyid mites Leafhoppers Leafrollers Lygus Powdery mildew		Do not apply by air on caneberry. Apply by ground only, using a minimum of 25 gallons of water per acre. Do not make more than 2 applications per year. Allow at least 7 days between applications. Do not apply more than 54.0 fluid ounces (0.57 lb ai) per acre per year. Preharvest Interval (PHI): 1 day  USE RECOMMENDATIONS - DISEASES Begin applications prior to onset of disease. Use of an agriculturally approved nonionic surfactant at 0.25% v/v may improve disease control. If weather conditions remain conducive to disease development, apply another registered fungicide product with a different mode of action 7 to 10 days later. Consult local extension recommendations or your agricultural consultant for information specific to

## Citrus Fruit (Crop Group 10-10)

Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; Mount White lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin orange, clementine); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these

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Pest	Rate/Acre	Use Directions	
Asian citrus psyllid Katydid	14.0 to 27.0 fl oz/acre (0.15 to 0.28 lb ai/acre	For high air velocity, low volume or air curtain sprayers, apply using a minimum of 30 gallons of water per acre.	
Aphids	17.0 to 27.0 fl oz/acre (0.18 to 0.28 lb ai/acre		
Citrus bud mite Citrus mealybug Citrus thrips Soft scale insects, including citricola scale, barnacle scale, brown soft scale Citrus peelminer Citrus red mite	21.0 to 27.0 fl oz/acre (0.22 to 0.28 lb ai/acre 24.0 to 27.0 fl oz/acre (0.25 to 0.28 lb ai/acre)	<ul> <li>Do not apply by air on citrus fruit.</li> <li>Do not use on nursery stock.</li> <li>Apply by ground only, using a minimum of 100 gallons of water per acre.</li> <li>Do not make more than 1 application per growing season.</li> <li>Do not apply more than 27.0 fluid ounces (0.28 lb ai) per acre per growing season.</li> <li>Do not make more than 2 applications per year.</li> </ul>	
Citrus rust mite (silver mite) Mealybugs Citrus orangedog* Citrus weevil* Cutworms*		Preharvest Interval (PHI): 3 days	
*suppression only			

## Pome Fruit (Crop Group 11-10)

apple; azarole; crabapple; loquat; mayhaw; Hook. & Arn., and *C. rufula* Sarg; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these

Pest/Disease	Rate/Acre	Use Directions
Katydid Leafhoppers	14.0 to 21.0 fl oz/acre (0.15 to 0.22 lb ai/acre)	USE RESTRICTIONS  • Do not apply by air on pome fruit.  • Apply by ground only, using a minimum of 100
Aphids (excluding woolly apple aphid)	17.0 to 21.0 fl oz/acre (0.18 to 0.22 lb ai/acre)	gallons of water per acre.  • Do not make more than 2 applications per year.  • Allow at least 14 days between applications.
Apple maggot Leafrollers Mealybugs Pear psylla Pear rust mite Plum curculio Thrips	21.0 to 27.0 fl oz/acre (0.22 to 0.28 lb ai/acre)	• Do not apply more than 54.0 fluid ounces (0.57 lb ai)
Codling moth* Powdery mildew*		
*suppression only		

## Stone Fruit (Crop Group 12-12); Persimmon; Pomegranate

apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; persimmon; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; pomegranate; sloe; cultivars, varieties, and/or hybrids of these

Pest/Disease	Rate/Acre	Use Directions	
Cherry fruit fly Katydid Leafhoppers	14.0 to 27.0 fl oz/acre (0.15 to 0.28 lb ai/acre)		
Aphids	17.0 to 27.0 fl oz/acre (0.18 to 0.28 lb ai/acre)	<ul> <li>Apply by ground only, using a minimum of 50 gallons of water per acre.</li> <li>Do not make more than 2 applications per growing season</li> </ul>	
Apple maggot Leafrollers Mealybugs Plum curculio Green fruitworm* Peach twig borer* Powdery mildew* Spotted wing drosophila* Stink bugs* Thrips*	21.0 to 27.0 fl oz/acre (0.22 to 0.28 lb ai/acre)		
*suppression only			

#### Tree Nuts (Crop Group 14-12)

African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these

Pest	Rate/Acre	Use Directions
Aphids	17.0 to 27.0 fl oz/acre	USE RESTRICTIONS
	(0.18 to 0.28 lb ai/acre)	
Hickory shuckworm Leafrollers Mealybugs Pecan nut casebearer	21.0 to 27.0 fl oz/acre (0.22 to 0.28 lb ai/acre)	1 Do not apply by all office fluts.
Navel orangeworm* Peach twig borer* Pecan leaf scorch mite* Pecan weevil* Plant bugs* Stink bugs*		gallons of water per acre.  • Do not make more than 1 application per growing season.  • Do not apply more than 27.0 fluid ounces (0.28 lb ai) per acre per growing season.  • Preharvest Interval (PHI): 14 days
*suppression only		

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container, and keep tightly closed when not in use. 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 HANDLING:** Nonrefillable container. Do not reuse or refill this container. Clean container 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 other procedures approved by state and local authorities.

In case of fire or spills, information may be obtained by calling 1-800-424-9300.

## IMPORTANT: READ BEFORE USE

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

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