

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

October 22, 2021

Carrie Takema Senior Regulatory Manager Nufarm Americas Inc. 4020 Aerial Center Parkway Suite 101 Morrisville, NC 27560

Subject: Label Amendment – Application for label amendment at the request of Washington State Department of Agriculture (WSDA) Product Name: Nuprid 4F Insecticide EPA Registration Number: 228-528 Application Date: September 30, 2021 Decision Number: 578931

Dear Ms. Takema:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Page 2 of 2 EPA Reg. No. 228-528 Decision No. 578931

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Joseph Belsky by phone at 703-347-0157, or via email at belsky.joseph@epa.gov.

Sincerely,

Ve

Venus Eagle, Product Manager 01 Invertebrate and Vertebrate Branch 3 Registration Division (7505P) Office of Pesticide Programs

Enclosure: Stamped label

<u>Note:</u> This Master label contains 2 Sub-labels which bear directions for use in Commercial Agriculture; and in Nursery, Greenhouse and Landscape Ornamentals



Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 228-528

NUPRID[®] 4F

SUB-LABEL A: COMMERCIAL AGRICULTURE SUB-LABEL B: NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

ACTIVE INGREDIENT:	
Imidacloprid, 1 -[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	40.4%
OTHER INGREDIENTS:	<u>59.6%</u>
TOTAL	100.0%

EPA REG. NO. 228-528 EPA EST. NO. _____ MANUFACTURED FOR NUFARM AMERICAS INC. 11901 SOUTH AUSTIN AVENUE ALSIP, IL 60803



[Nufarm: Grow a better tomorrow] [Grow a better tomorrow]

000228-00528.20211008

GROUP IMIDACLOPRID

4A

NUPRID[®] 4F **INSECTICIDE**

[alternate brand names]

NUPRID[®] 4F MAX Insecticide ST-NUPRID[®] 480 FS Insecticide

A SYSTEMIC AND FOLIAR INSECTICIDE FOR USE ON LISTED FIELD CROPS including COTTON, TOBACCO, POTATO, SOYBEANS and PEANUTS; IN CITRUS, TREE NUT, and FRUIT ORCHARDS; ON FIELD and GREENHOUSE VEGETABLES; ON BERRY, BUSH and VINE CROPS; and ON OTHER LISTED CROPS

ACTIVE INGREDIENT:

Imidacloprid, 1 -[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	40.4%
OTHER INGREDIENTS:	<u>59.6%</u>
TOTAL	100.0%

Contains 4 pounds of imidacloprid per gallon. [480 grams active per liter]

KEEP OUT OF REACH OF CHILDREN CAUTION

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-528 EPA EST. NO. _____

MANUFACTURED FOR NUFARM AMERICAS INC. **11901 SOUTH AUSTIN AVENUE** ALSIP, IL 60803



NET CONTENTS _____ GALS. (_____Liters)

[Nufarm: Grow a better tomorrow] [Grow a better tomorrow]

	FIRST AID	
IF INHALED	 Move the 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	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. DO NOT give anything by mouth to an unconscious person. 	
IF IN EYES	 Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. 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 to 20 minutes. Call a poison control center or doctor for treatment advice. 	
HOT LINE NUMBER		

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

No specific antidote is available. Treat the patient symptomatically.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco, or using the toilet. Avoid contact with eyes or clothing. Wear protective eye wear. Wear long sleeved shirt and long pants, socks, shoes, and chemical resistant gloves made of butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton \geq 14 mil.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made of butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton >14 mil.
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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.

USER SAFETY RECOMMENDATIONS

User must:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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

DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. **DO NOT** apply this product or allow it to drift to blooming crops/plants or weeds. This product is toxic to wildlife and highly toxic to aquatic invertebrates. This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect 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 on to 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

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Note to Reviewer: the two statements in brackets below may be used as they relate to Tilia species:

[**DO NOT** apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon,]

[DO NOT apply this product, by any application method, to linden, basswood or other Tilia species.]

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these directions for use for crops that are contracted to have pollinator services or for food/feed and commercially grown ornamentals that are attractive to pollinators:

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.

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 the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Chemical-resistant gloves made of butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton >14 mil
- Shoes plus socks

NON-AGRICULTURAL 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, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

PRODUCT INFORMATION

Thorough uniform coverage is necessary to achieve insect control. A spray adjuvant may be used to improve coverage. This product may not knockdown established and heavy insect populations with a single application. Two applications may be required to achieve control; retreat if needed and as directed on this label. This product may be tank mixed with other insecticides as specified for knockdown of pests or for improved control of other pests.

Applying this product to crops grown for production of true seed intended for private or commercial planting is not permitted unless allowed under state approved 24(c) labeling. Additional information on this product uses for listed crops and other questions may be obtained from the Cooperative Extension Service, PCA's, consultants or your local Nufarm representative.

RESISTANCE MANAGEMENT

For resistance management, this product contains a Group 4A insecticide. Any insect/mite population may contain individuals naturally resistant to this product and other Group 4A 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 one or more of the following steps:

- Rotate the use of this product or other Group 4A insecticides within a growing season, or among growing seasons, with different insecticide 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, record keeping, 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 pest control advisors for any additional pesticide resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report non-performance or suspected resistance, contact Nufarm at 1-800-345-3330.

Other Group 4A, neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Intruder, Impulse, Leverage, Pasada, Provado, Trimax Pro and Venom. Other 4A Group, neonicotinoid products used as soil/seed treatment include: Admire Pro, Advise, Alias, Belay, Clutch, Couraze, Cruiser, Gaucho, Macho, Macho Max, Platinum, Venom and Widow. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at http://irac-online.org/.

PRODUCT USE INSTRUCTIONS

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

SPRAY DRIFT MANAGEMENT

The responsibility of avoiding spray drift is with the applicator. The applicator must consider weather related factors and the interaction of application equipment when making application decisions.

Mixing and Loading Requirements

The use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading areas and potential surface to groundwater conduits such as field sumps, uncased well head, sinkholes or field drains.

Aerial Applications

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

Importance of Droplet Size

The droplet size is an important factor and can influence drift. Small droplets (<150 - 200 microns) drift to a greater extent than large droplets. Applications typically should be made to deliver the largest droplet range that provides adequate control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection.

Wind Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. **DO NOT** apply when winds are greater than 15 mph and avoid gusty and windless conditions.

Restrictions During Temperature Inversions

DO NOT make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions typically restrict vertical air mixing, which then could cause small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions typically are characterized by increasing temperature 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. 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 mixing.

Airblast (Air Assist) Specific Recommendations for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. The following specific drift management practices must be followed.

- · Adjust 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 the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

No-Spray Zone Requirements for Foliar Applications

DO NOT apply by ground within 25 feet, or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

RUNOFF MANAGEMENT

DO NOT cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, best management practices for minimizing runoff must be employed.

ENDANGERED SPECIES NOTICE

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

ROTATIONAL CROPS

Crops which are listed on imidacloprid labels or crops that have existing tolerances for imidacloprid may be planted in treated areas as soon as practical after the last imidacloprid application. Crops that are not found on an imidacloprid label, or crops that do not have existing tolerances for imidacloprid, may not be planted in treated areas for 12-months after the last application. Refer to the table below for plantback intervals for different crops. Note that if cover crops are planted any time after an application of this product, those crops may not be grazed or harvested for food or feed.

ROTATIONAL CROPS - PLANT-BACK INTERVALS

IMMEDIATE PLANT-BACK:

All crops on this label plus the following crops not on this label: barley, canola, corn (field, pop & sweet), rapeseed, sorghum, sugar beet and wheat.

30-DAY PLANT-BACK:

Cereals (including buckwheat, millet, oats, rice, rye, and triticale), soybeans and safflower

10-MONTH PLANT-BACK:

Onions and bulb vegetables

12-MONTH PLANT-BACK:

All other crops

APPLICATION INSTRUCTIONS

This product can be applied as a foliar spray, or as a soil treatment (see Crop Specific Restrictions and Limitations). Thorough uniform coverage is necessary to achieve insect control. Use adequate spray volumes, properly calibrated application equipment, and an adjuvant to improve coverage. Failure to provide adequate coverage and retention of this product on leaves and fruit may result in loss of insect control or delay in onset of activity.

This product may not knockdown established and heavy insect populations with a single application. Two applications may be required to achieve control. Scout fields and retreat if needed.

This product may be tank mixed with other insecticides as recommended for knockdown of pests or for improved control of other pests.

Apply this product with properly calibrated ground or aerial application equipment.

Minimum spray volumes unless otherwise specified on the Crop Specific Restrictions and Limitations section are 10 gallons/Acre by ground applications and 5 gallons/Acre through aerial equipment.

This product may also be applied by ground or overhead chemigation (see CHEMIGATION APPLICATION section below) if allowed in crop specific application section.

Apply specified rate per acre as a foliar spray as pest populations begin to build. **DO NOT** apply more than 0.5 lbs. active ingredient per acre, per calendar year, regardless of formulation or method of application, unless specified within the **Crop Specific Restrictions and Limitations** for a given crop.

Mix Preparation

To prepare the application mixture:

- 1. Fill the spray tank with a portion of the required amount of water and begin agitation.
- 2. Add the specified amount of NUPRID® 4F Insecticide.
- 3. Fill the tank with the remaining water needed. Maintain sufficient agitation during mixing and application.

NOTE: This product may also be used with other pesticides and/or fertilizer solutions; refer to the Tank Mix and Compatibility Note below. When tank mixtures of this product and other pesticides are involved, prepare the tank mixture as specified above and follow the suggested Mixing Order below.

Tank Mixes

Unless otherwise prohibited on this label or the label of an intended tank mix product, this product may be applied in combination with any pesticide registered for the same crop, timing, and method of application. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. **IMPORTANT: PESTICIDE TANK MIXES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A TANK MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL OR 24(C) LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.**

Compatibility

Before full-scale mixing of this product with other pesticides, fertilizers, secondary plant nutrients, adjuvants, surfactants or oils, you must determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the tank mix combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent, IMPORTANT: MIXING WITH OTHER SUBSTANCES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL OR 24(c) LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.

Mixing Order

When pesticide mixtures are needed, add wettable powders first, this product or other flowables second, and emulsifiable concentrates last. Ensure good agitation as each component is added and do not add an additional component until the previous is thoroughly mixed. A fertilizer/pesticide compatibility agent may be needed if a fertilizer solution is to be added to the mixture. Be sure to maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

Further information on Tank Mixes is available from your local Nufarm representative.

CHEMIGATION APPLICATION

Types of Irrigation Systems

Make foliar chemigation applications of this product to crops through overhead sprinkler chemigation systems if specified in crop- specific restrictions and limitations application sections. Make soil chemigation applications of this product only to crops through chemigation as specified in crop-specific application sections and only through low-pressure systems specifically listed for a given crop. **DO NOT** apply this product through any other type of irrigation system.

Water Volume

Chemigation applications of this product must be made as concentrated as possible. Retention of this product on target site of insect infestation is necessary for optimum activity. Chemigation of this product in water volumes exceeding 0.10 inches/Acre are not recommended.

Uniform Water Distribution and System Calibration

The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

Chemigation Monitoring

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Drift

DO NOT apply when the wind speed favors drift beyond the area intended for treatment.

Required System Safety Devices

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or normally shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system must be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

FIELD CROPS

COTTON			
SOIL APPLICATIONS			
Pests	Fluid ounces/1,000 row-feet	Fluid ounces/Acre	
For control of:			
Cotton aphid		8.5 – 10.6	
Plant bugs	0.65	(Depending on row-spacing)	
Thrips		(Depending of row-spacing)	
Whiteflies			
	Application Method	ls	
Apply specified dosage by one o	f the following methods:		
		ct application on or below the seed at planting; OR	
2. Narrow band application below the eventual seed bed row in a bedding operation 7 or fewer days before planting; OR			
Chemigation into root zone through low-pressure drip or trickle irrigation equipment.			
Restrictions			
Maximum amount of product allowed per calendar year: 10.6 fluid ounces/Acre (0.33 lb. Al/A)			
Pre-Harvest Interval (PHI): 14 days			
Regardless of formulation or method of application, DO NOT apply more than 0.5 lbs. of active ingredient per acre per calendar			
year of NUPRID [®] 4F Insecticide,			
Provado [®] , Trimax [®] or Leverage [®] , including seed treatment as Gaucho [®] , soil and foliar uses.			
DO NOT graze treated fields after any application of this product.			
See Resistance Management section of this label.			

	FOLIAR APPLICATIONS		
Pests		Fluid ounces/Acre	
For control of:			
Cotton aphid			
Cotton fleahopper			
Bandedwinged whitefly			
Plant bugs (excludes <i>Lygus hesperus</i>)		1.0 – 2.0	
Green stink bug			
Southern green stink bug			
Bollworm/Budworm (ovicidal effect)			
For suppression of:			
Lygus bugs (<i>Lygus hesperus</i>)		2.0	
Whiteflies (other than banded winged whitef		2:0	
Whitemes (other than banded winged white			
Apply through properly collibrated ground	Application Methods	mont	
Apply through properly calibrated ground, aer	Restrictions		
Pre-Harvest Interval (PHI): 14 days	Restrictions		
Minimum interval between applications: 7 day		1/4 \	
Maximum amount allowed per calendar year:			
	cation, DO NOT apply more than 0.5	5 lbs. of active ingredient per acre per calendar	
year of NUPRID [®] 4F Insecticide,		e	
Provado [®] Irimay [®] or Lavarada [®] including of	and treatment as (Louche® call and		
Provado [®] , Trimax [®] or Leverage [®] , including se		iolial uses.	
DO NOT graze treated fields after any application	ation of this product.	ionar uses.	
DO NOT graze treated fields after any applica	ation of this product. TANK MIX APPLICATIONS		
DO NOT graze treated fields after any applica Pests	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate	BIDRIN 8 Rate ¹	
DO NOT graze treated fields after any applica Pests (in addition to those listed above)	ation of this product. TANK MIX APPLICATIONS		
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of:	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate	BIDRIN 8 Rate ¹ Fluid ounces/Acre	
DO NOT graze treated fields after any applica Pests (in addition to those listed above)	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate	BIDRIN 8 Rate ¹	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate	BIDRIN 8 Rate ¹ Fluid ounces/Acre	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of:	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre	BIDRIN 8 Rate ¹ Fluid ounces/Acre	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug)	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre	BIDRIN 8 Rate ¹ Fluid ounces/Acre	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2	
DO NOT graze treated fields after any application Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks	BIDRIN 8 Rate1 Fluid ounces/Acre 1.6 - 3.2 4.0 - 8.0	
Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks des and/or fertilizer solutions. When ta	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0	
Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator This product can be tank mixed with other pesticit the tank mixture as specified above in the Mix Pr	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks des and/or fertilizer solutions. When ta	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0	
Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator This product can be tank mixed with other pestici the tank mixture as specified above in the Mix Pr 1. Add wettable powders first;	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks des and/or fertilizer solutions. When ta reparation instructions section. Follow	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0	
Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator This product can be tank mixed with other pesticities the tank mixture as specified above in the Mix Pr 1. Add wettable powders first; 2. Add this product or other flowables sectored	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks des and/or fertilizer solutions. When ta reparation instructions section. Follow	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator This product can be tank mixed with other pesticit the tank mixture as specified above in the Mix Pr 1. Add wettable powders first; 2. Add this product or other flowables sec 3. Add emulsifiable concentrates last.	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks des and/or fertilizer solutions. When ta reparation instructions section. Follow soud;	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0 nk-mixing this product with other pesticides, prepare the following general mixing order:	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator This product can be tank mixed with other pesticit the tank mixture as specified above in the Mix Pr 1. Add wettable powders first; 2. Add this product or other flowables sec 3. Add emulsifiable concentrates last. Be sure to maintain agitation as each comport	Ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks Ides and/or fertilizer solutions. When ta reparation instructions section. Follow cond; hent is added and do not add an add	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0 nk-mixing this product with other pesticides, prepare the following general mixing order: ditional component until the previous component	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator This product can be tank mixed with other pesticit the tank mixture as specified above in the Mix Pr 1. Add wettable powders first; 2. Add this product or other flowables sec 3. Add emulsifiable concentrates last. Be sure to maintain agitation as each compori is thoroughly integrated into the mixture. If a full	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks des and/or fertilizer solutions. When ta reparation instructions section. Follow cond; nent is added and do not add an add retilizer solution is added, a fertilizer	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0 nk-mixing this product with other pesticides, prepare the following general mixing order: ditional component until the previous componer r-pesticide compatibility agent may be needed.	
DO NOT graze treated fields after any applica Pests (in addition to those listed above) For early season control of: Thrips For mid to late season control of: Thrips For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator This product can be tank mixed with other pesticit the tank mixture as specified above in the Mix Pr 1. Add wettable powders first; 2. Add this product or other flowables sec 3. Add emulsifiable concentrates last. Be sure to maintain agitation as each comport is thoroughly integrated into the mixture. If a full	ation of this product. TANK MIX APPLICATIONS NUPRID 4F Rate Fluid ounces/Acre 1.0 – 1.5 Remarks des and/or fertilizer solutions. When ta reparation instructions section. Follow cond; nent is added and do not add an add retilizer solution is added, a fertilizer ition to those listed above for NUPR	BIDRIN 8 Rate ¹ Fluid ounces/Acre 1.6 – 3.2 4.0 – 8.0 nk-mixing this product with other pesticides, prepare the following general mixing order: ditional component until the previous component r-pesticide compatibility agent may be needed. ID 4F foliar applications)	

ΡΟΤΑΤΟ		
SOIL APPLICATIONS		
Pests	Fluid ounces/1,000 row-feet	Fluid ounces/Acre
For control of:		
Aphids		
Colorado potato beetle		
Flea beetles		
Leafhoppers		
Potato psyllid		
For suppression of:	0.45 - 0.65	6.5 - 10.0
Wireworms (with in-furrow spray		
at planting)		
For suppression of disease symptoms of:		
Potato leaf roll virus (PLRV)		
Potato yellows		
Net necrosis (PLRV)		

Application Methods			
Apply specified dosage in one of the following methods:			
	es of the row covered with 3 or more		
		g covered with 3 or more inches of soil; OR	
		on 7 or fewer days before planting. For effective	
		below soil surface and in contact with seed piece	
or within root zone. For potatoes gr	own on highly permeable soils with s	hallow water table, at-plant applications of this	
product may be made in a 2 to 4 in	ch band (width of planter shoe openir	ng) and completely covered.	
	Restrictions		
Maximum amount of product allowed per	calendar year: 10.0 fluid ounces/Ac	re (0.31 lb. Al/A)	
Pre-Harvest Interval (PHI): 7 days	,		
	FOLIAR APPLICATIONS		
Pests		Fluid ounces/Acre	
For control of:			
Aphids			
Colorado Potato beetle			
Flea beetles		1.5	
Fleahoppers			
Psyllids	Application Matheda		
Apply as a breadcast or directed aprovem	Application Methods	und, aerial or chemigation application equipment.	
Thorough coverage of foliage is necessary		und, aenal of chemigation application equipment.	
Thorough coverage of foliage is necessary	Restrictions		
	Restrictions		
Pre-Harvest Interval (PHI): 7 days			
Minimum interval between applications: 7	days		
Maximum amount allowed per calendar ye			
	SEED PIECE APPLICATIONS		
Pests	Fluid ounces/100 lbs seed	Fluid ounces/Acre	
For control of:			
Aphids			
Colorado potato beetle			
Flea beetles	0.2 - 0.4	4.0 - 8.0	
Leafhoppers			
Potato psyllid			
Wireworms (seed piece protection)			
For suppression of disease			
symptoms of:			
Potato leaf roll virus (PLRV)	0.4	8.0	
Potato yellows	0.1	0.0	
Net necrosis (PLRV)			
Application Methods			
Apply specified dosage as a diluted spray	Application methods Apply specified dosage as a diluted spray onto seed pieces using a shielded spray system. Dilute with 3 parts water, or less, to		
		inert absorbent dusts may be applied after this	
		s that are equipped to remove spray mist or dust.	
		osure of seed pieces treated with this product to	
sunlight and in accordance with the recommendation of your local Extension specialist. Consult your local Nufarm representative			
or crop protection product dealer for information relevant to your area.			
Remarks			
¹ Based on a seeding rate of 2000 lb./Acre			
Restrictions			
	Maximum amount of product allowed per calendar year: 10.0 fluid ounces/Acre (0.31 lb. Al/A)		
		re (0.31 lb. Al/A)	
DO NOT use treated seed pieces for food	, feed, or fodder.		
DO NOT use treated seed pieces for food DO NOT apply any subsequent application	, feed, or fodder.	[®] , Leverage [®] or Provado [®] following a seed-piece	
DO NOT use treated seed pieces for food DO NOT apply any subsequent application treatment of this product.	, feed, or fodder.		
DO NOT use treated seed pieces for food DO NOT apply any subsequent application	, feed, or fodder. ns of this product (in-furrow), Gaucho	[®] , Leverage [®] or Provado [®] following a seed-piece	

FOLIA	R APPLICATIONS ¹	
Pests	Fluid ounces/Acre	
For control of:		
Aphids		
Bean leaf beetle		
Cucumber beetles / Rootworm adults	1.5	
Japanese beetle (adults)		
Leafhoppers		
Whiteflies		
Арр	lication Methods	
Apply as a broadcast or directed spray method through properly calibrated ground, aerial or chemigation application equipment.		
Thorough coverage of foliage is necessary.		
	Restrictions	
Pre-Harvest Interval (PHI): 21 days		
Minimum interval between applications: 7 days		
Maximum amount allowed per calendar year: 3.65 fluid ou	unces/Acre (0.13 lb. Al/A)	
¹ This use is not permitted in CA unless otherwise directed	d by state approved 24(c) labeling.	

	SOIL APPLICATIONS	
Pests	Fluid ounces/1,000 plants (as seedling tray drench)	Fluid ounces/1,000 plants (in-furrow or transplant-water)
For control of:	(as seeding hay drench)	
Aphids	0.5	0.7
Flea beetles	0.5	0.7
Field Deetiles		
Mole crickets		
Whiteflies	0.7 – 1.4	0.9 - 1.4
Wireworms		
For suppression of disease symptoms of: Tomato spotted wilt virus (TSWV)	1.4	1.4
· · · · ·	Application Methods	
Apply specified dosage of this product in one of		
 Uniform, broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting, followed immediately by overhead irrigation to wash this product from foliage into potting media. Failure to wash this product from foliage may result in a reduction in pest control. Transplants must be handled carefully during setting to avoid dislodgir treated potting media from roots.; OR In-furrow spray or transplant-water drench during setting.; OR Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. 		
Chemigation into root zone through low	-pressure drip, trickle, micro-spr Remarks	inkler or equivalent equipment.
		een shown to be the most efficacious method of combination of the tray drench in the planthouse
and/or transplant-water drench in field. Advers a delay in control.		e a delay in uptake of this product into the plant and
	Restrictions	
Pre-Harvest Interval (PHI): 14 days		
Maximum amount of product allowed per cale	ndar year: 16.0 fluid ounces/A	cro(0.50 lb A l/A)
	FOLIAR APPLICATIONS	
Pests		Fluid ounces/Acre
		Fluid ounces/Acre
Pests		
Pests For control of:		Fluid ounces/Acre
Pests For control of: Aphids		Fluid ounces/Acre
Pests For control of: Aphids For control of:	FOLIAR APPLICATIONS	Fluid ounces/Acre 0.8 – 1.6
Pests For control of: Aphids For control of: Flea beetles	FOLIAR APPLICATIONS	Fluid ounces/Acre 0.8 – 1.6
Pests For control of: Aphids For control of: Flea beetles Japanese beetles Apply as a broadcast or directed spray method	FOLIAR APPLICATIONS	Fluid ounces/Acre 0.8 – 1.6 1.6
Pests For control of: Aphids For control of: Flea beetles Japanese beetles	FOLIAR APPLICATIONS Application Methods d through properly calibrated gr	Fluid ounces/Acre 0.8 – 1.6
Pests For control of: Aphids For control of: Flea beetles Japanese beetles Apply as a broadcast or directed spray methor Thorough coverage of foliage is necessary.	FOLIAR APPLICATIONS	Fluid ounces/Acre 0.8 – 1.6 1.6
Pests For control of: Aphids For control of: Flea beetles Japanese beetles Apply as a broadcast or directed spray method	FOLIAR APPLICATIONS Application Methods ad through properly calibrated gr Restrictions	Fluid ounces/Acre 0.8 – 1.6 1.6

PEANUT		
SOIL APPLICATIONS ¹		
Pests	Fluid ounces/Acre	
For control of: Aphids Leafhoppers Whiteflies	8.0 – 12.0	
For suppression of: Thrips	12.0	
	Application Methods	
 Apply as a: 1. Chemigation into root-zone through properly calibrated low-pressure (drip, trickle, micro-sprinkler or equivalent) equipment.; OR 2. In-furrow spray directed on or below seed. 		
	Remarks	
Applications of this product have been shown to increase the incidence of Tomato spotted wilt virus (TSWV), and possibly other tospoviruses, on multiple varieties of peanut. Prior to making product applications, contact the State, Cooperative This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling. Extension Service, or Nufarm representative, for recommendations to discuss the risk and benefits of imidacloprid applications.		
	Restrictions	
Pre-Harvest Interval (PHI): 14 days Maximum amount allowed per calendar year: 12.0 fluid ounces/Acre (0.38 lb. Al/A) ¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling.		
	FOLIAR APPLICATIONS ¹	
Pests	Fluid ounces/Acre	
For control of: Aphids Leafhoppers Whiteflies	1.4	
Application Methods		
Apply as a broadcast or directed spray method through properly calibrated ground, aerial or chemigation application equipment. Thorough coverage of foliage is necessary.		
	Restrictions	
Pre-Harvest Interval (PHI): 14 days Minimum interval between applications: 5 da Maximum amount allowed per calendar year ¹ This use is not permitted in CA unless other		

VEGETABLE CROPS

CUCURBIT VEGETABLES: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban			
pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), <i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i> including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes			
hybrids and/or varieties of <i>Citrullus lanatus</i>). SOIL APPLIC	ATIONS (FIELD)		
Pests	Fluid ounces/Acre		
For control of:			
Aphids			
Cucumber beetles	8.0 – 12.0		
Leafhoppers Thrips (foliage-feeding thrips only)			
Whiteflies			
For suppression of disease symptoms of: Bacterial wilt (as vectored by various cucumber beetles) Leaf silvering resulting from whitefly feeding	12.0		
	on Methods		
Apply specified dosage of this product in one of the following me 1. Chemigation into root zone through low-pressure drip, tri			
 Chemigation into root zone through low-pressure drip, tri In-furrow spray directed on or below seed; OR 			
3. Narrow (2" or less) surface band spray over seed-line duri	ng planting incorporated to a depth of 1 to 1.5" with sufficient		
irrigation within 24 hours of application; OR			
 Narrow band spray directly below eventual seed row in b Post-seeding drench, transplant-water drench, or hill dre 			
 Subsurface side-dress on both sides of each row. This planet. 			
Rest	rictions		
Pre-Harvest Interval (PHI): 21 days Maximum amount of product allowed per crop season: 12.0 flu DO NOT use on crops grown for seed unless allowed by state a			
GREENHOUSE	APPLICATIONS ¹		
Pests	Fluid ounces/1000 plants		
For control of: Aphids Whiteflies	0.05		
	ion Method		
Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to			
transplanting, in one of the following manners:			
1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash this product from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash this product			
from foliage may result in reduced pest control; OR			
	ate volume to thoroughly saturate soil media without loss of		
gravitational solution from the bottom of the tray.			
Remarks The application made in the planthouse is not intended as a substitution for a field application. An additional field application must			
be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number			
of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid			
dislodging treated potting media from roots. Important Note: Not all varieties of cucurbit vegetables have b	peen tested for tolerance to this product applied to seedling flats.		
Important Note: Not all varieties of cucurbit vegetables have been tested for tolerance to this product applied to seedling flats. Therefore, treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.			
Restrictions			
Maximum number of greenhouse applications: 1 Maximum amount of product allowed per greenhouse application	nn: 0 05 fluid ounce (0 001568 lb A1)/ 1 000 plant e		
Maximum amount of product allowed per greenhouse application: 0.05 fluid ounce (0.001568 lb AI)/ 1,000 plants . DO NOT use on crops grown for seed unless allowed by state approved 24(c) labeling.			
¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling.			

FRUITING VEGETABLES: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and			
sweet) Tomato, Pepinos, Tomatillo.			
SOIL APPLICATIONS (FIELD) Pests Fluid ounces/Acre			
For control of:	This ounces/Acre		
Aphids			
Colorado potato beetles			
Flea beetles	Okra & Pepper		
Leafhoppers	8.0 – 16.0		
Thrips (foliage-feeding only)			
Whiteflies Other Listed Crops			
For suppression of disease symptoms of: 8.0 - 12.0 Tomato mottle virus 8.0 - 12.0			
Tomato spotted wilt virus			
Tomato yellow leaf curl virus			
	ion Methods		
Apply specified dosage of this product in one of the following m			
 Chemigation into root zone through low-pressure drip In-furrow spray directed on or below seed; OR 			
 Narrow (2" or less) surface band spray over seed-line irrigation within 24 hours of application; OR 	during planting incorporated to a depth of 1 to 1.5" with sufficient		
 Narrow band spray directly below eventual seed row Post-seeding drench, transplant-water drench, or hill 	in bedding operation 14 or fewer days before planting; OR drench; OR		
6. Subsurface side-dress on both sides of each row. Th			
Pre-Harvest Interval (PHI): 21 days			
Maximum amount of product allowed on Okra and Pepper per	crop season: 16.0 fluid ounces/Acre (0.5 lb. Al/A). getable crops per crop season: 12.0 fluid ounces/Acre (0.38 lb.		
DO NOT use on crops grown for seed unless allowed by state	approved 24(c) labeling.		
	ICATIONS (FIELD)		
Pests	Fluid ounces/1000 plants		
For control of:			
Aphids			
Colorado potato beetle	1.5 – 2.5		
Leaf beetles Whiteflies ¹			
For control of:			
Pepper weevil (Pepper only) ²	2.5		
	ion Methods		
	rough properly calibrated ground, aerial or chemigation application		
	emarks		
Applications of this product must be incorporated into a full-season program, where alternations of effective products from multiple classes of chemistry and different modes of actions are utilized in a blocked or windowed approach. For additional information, please contact your Nufarm representative, Extension Specialist or crop advisor.			
¹ Higher specified rate within the rate range must be used when targeting adult whiteflies.			
	ground equipment only. Time applications prior to a damaging pest		
population becoming established. Good coverage of foliage and fruit is necessary for target pest control.			
Restrictions			
Pre-Harvest Interval (PHI): 0 days			
Minimum interval between applications: 5 days			
Maximum amount of product allowed per crop season: 7.7 fluid ounce (0.24 lb. AI)/A DO NOT use on crops grown for seed unless allowed by state approved 24(c) labeling.			
GREENHOUSE APPLICATIONS ¹			
Pests	Fluid ounces/1000 plants		
For control of:	0.05		
Aphids Whiteflies	0.05		
	ion Methods		
Apply specified dosage to seedlings in trays in the planthouse, t			
transplanting, in one of the following manners:			
1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash this product			

from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash this product from foliage may result in reduced pest control; OR

2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

Remarks

The application made in the planthouse is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.

Important Note: Not all varieties of cucurbit vegetables have been tested for tolerance to this product applied to seedling flats. Therefore, treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

Restrictions

Maximum number of greenhouse applications allowed: 1

Maximum amount of product allowed per greenhouse application: 0.05 fluid ounce (0.001568 lb. Al)/1,000 plants.

DO NOT use on crops grown for seed unless allowed by state approved 24(c) labeling.

¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling.

GREENHOUSE VEGETABLES: Mature Cucumber and Tomato plants in production greenhouses ONLY.

Pests	Fluid ounces/1000 plants	
For control of:		
Aphids	0.7	
Whiteflies		
Applicat	ion Methods	
Apply specified dosage in a minimum of 16 gallons of wate	r for tomatoes and 21 gallons of water for cucumbers using soil	
drenches, micro-irrigation, drip irrigation, or hand-held or motorized calibrated irrigation equipment. DO NOT apply to immature		
plants since phytotoxicity may occur.		
Re	emarks	
	shold and beneficials are not able to maintain pest populations	
below damage thresholds. Repellency of bumble bee pollinators and negative effects on some beneficials (Onius		
sp.) can occur when this product is applied.		
Many varieties of vegetables have been tested for tolerance to this product and show good safety. However, certain		
varieties may show more sensitivity to this product. Therefore, treat a few plants before treating the whole greenhouse.		
Res	trictions	

Pre-Harvest Interval (PHI): 0 days

Maximum number of applications per crop season: 1

Maximum amount of product allowed per crop season: 0.7 fluid ounce (0.022 lb. Al)/1,000 plants.

DO NOT use on crops grown for seed unless allowed by state approved 24(c) labeling.

GLOBE ARTICHOKE	
SOIL	APPLICATION
Pests Fluid ounces/Acre	
For control of:	
Aphids	8.0 - 16.0
Leafhoppers	
Applie	cation Methods
Apply specified dosage of this product in one of the followin 1. Chemigation into root zone through low-pressure drip 2. In-furrow spray directed on or below seed.	ng methods: b, trickle, micro-sprinkler or equivalent equipment; OR
R	estrictions
Pre-Harvest Interval (PHI): 7 days Maximum amount of product allowed per calendar year: 16 .	.0 fluid ounce/Acre (0.50 lb. Al/A)
FOLIAI	R APPLICATION
Pests Fluid ounces/Acre	
For control of: Aphids Leafhoppers	1.6 – 4.0
	cation Methods
Apply this product as a broadcast or directed spray method	through properly calibrated ground, aerial or chemigation application

equipment. Thorough coverage of foliage is necessary.

Pre-Harvest Interval (PHI): 7 days

Restrictions

Minimum Interval between applications: 14 days Maximum amount of product allowed per calendar year: 16.0 flu	$\frac{1}{2}$
chive, Chive, Clary, Coriander (cilantro or Chinese parsley leave Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marig Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, T	
	ATIONS (FIELD)
Pests	Fluid ounces/Acre
For control of: Aphids Flea beetles Leafhoppers Whiteflies	8.0 – 12.0
For suppression of:	
Thrips (foliage-feeding only)	n Methods
 Apply specified dosage in one of the following methods: 1. In-furrow spray during planting directed on or below see 2. In-furrow spray or transplant-water drench during setting 3. Shanked-into or below eventual seed-line; OR 4. Chemigation into root zone through low-pressure drip, tri 	g or transplanting; OR
	narks
Not all crops and/or varieties listed above have been tested for p crop and variety, treat only small areas or numbers of plants and	phytotoxic effects. Without specific knowledge about a particular d evaluate prior to full-scale use.
Pre-Harvest Interval (PHI): 14 days Maximum amount of product allowed per crop season: 12.0 flui	ictions d ounces/Acre (0.38 lb. Al/A)
FOLIAR APPLIC	ATIONS (FIELD)
Pests	Fluid ounces/Acre
For control of: Aphids Leaf beetles Leafhoppers Whiteflies	1.4
	on Methods
	y calibrated ground, aerial or chemigation application equipment.
	narks
may improve coverage and control.	te not to exceed the adjuvant manufacturer's specified use rate phytotoxic effects. Without specific knowledge about a particular d evaluate prior to full-scale use.
Restri	ictions
Pre-Harvest Interval (PHI): 7 days Minimum interval between applications: 5 days Maximum amount of product allowed per crop season: 4.2 fluid	ounce (0.13 lb. Al/A)

HEAD and STEM BRASSICA VEG	ETABLES ¹ : Broccoli, Broccoli raab (rapini), Brussels sprouts,			
Cabbage, Cauliflower, Cavalo broccoli, Chinese (gailon) broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, plus Turnip tops				
	na, musiaru greens, musiaru spinach, Rape greens, pius rumip iops			
(leaves).				
LEAFY GREENS VEGETABLES ¹ :	Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula			
(Roquette) Chervil Chrysanthemum (edible leaved and	garland), Corn salad, Cress (garden), Cress (upland, yellow rocket,			
	Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter),			
	and vine (Malabar spinach, Indian spinach)), Watercress ² (including			
upland).				
SOIL APF	PLICATIONS (FIELD)			
Pests	Fluid ounces/Acre (on 36 in. rows)			
For control of:				
Aphids				
Leafhoppers	5.0 – 12.0			
Thrips (foliage-feeding only)				
Whiteflies				
	action Methodo			
	cation Methods			
Apply specified dosage of this product in one of the followi				
	p, trickle, micro-sprinkler or equivalent equipment; OR			
In-furrow spray directed on or below seed; OR				
Narrow (2" or less) surface band spray over seed-line	during planting incorporated to a depth of 1 to 1.5" with sufficient			
irrigation within 24 hours of application; OR				
4. Narrow band spray directly below eventual seed row	in bedding operation 14 or fewer days before planting; OR			
5. Post-seeding drench, transplant-water drench, or hi				
 Subsurface side-dress on both sides of each row. Th 				
	Restrictions			
	Cestilicitons			
Pre-Harvest Interval (PHI): 21 days				
Maximum amount of product allowed per crop season: 12.				
¹ DO NOT use on crops grown for seed unless permitted by				
² For applications made to watercress, production fields magnetized	ust be drained of water at least 24 hours prior to application and water			
must not be reapplied to the field for a minimum of 24 hours	following application. Applications must be made to fully leafed-up			
canopies only. DO NOT apply to native cress growing in s	reams or other bodies of water.			
FOLIAR AF	PLICATIONS (FIELD)			
Pests	Fluid ounces/Acre			
For control of:				
Aphids				
Flea beetles	1.5			
	1.5			
Leafhoppers				
Whiteflies				
Appl	cation Methods			
Apply this product as a broadcast or directed spray method through properly calibrated ground, aerial or chemigation app				
equipment. Thorough coverage of foliage is necessary.				
l F	Restrictions			
Pre-Harvest Interval (PHI): 7 days				
Minimum interval between applications: 5 days				
Maximum amount of product allowed per crop season: 7.7	fluid ounces/Acre (0.23 lb, AI/A)			
¹ DO NOT use on crops grown for seed unless permitted by				
² For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water				
must not be reapplied to the field for a minimum of 24 hours following application. Applications must be made to fully leafed-up				
	treams or other bodies of water.			
canopies only. DO NOT apply to native cress growing in s				
canopies only. DO NOT apply to native cress growing in s				
	rdoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only),			
LEAFY PETIOLE VEGETABLES: Ca				
LEAFY PETIOLE VEGETABLES: Ca Florence fennel (including sweet anise, sweet fennel, finocchi	o), Rhubarb, Swiss chard			
LEAFY PETIOLE VEGETABLES: Ca Florence fennel (including sweet anise, sweet fennel, finocchi SOIL APP	b), Rhubarb, Swiss chard PLICATIONS (FIELD)			
LEAFY PETIOLE VEGETABLES: Ca Florence fennel (including sweet anise, sweet fennel, finocchi SOIL APP Pests	o), Rhubarb, Swiss chard			
LEAFY PETIOLE VEGETABLES: Ca Florence fennel (including sweet anise, sweet fennel, finocchi SOIL APF Pests For control of:	b), Rhubarb, Swiss chard PLICATIONS (FIELD)			
LEAFY PETIOLE VEGETABLES: Cal Florence fennel (including sweet anise, sweet fennel, finocchi SOIL APF Pests For control of: Aphids	o), Rhubarb, Swiss chard PLICATIONS (FIELD) Fluid ounces/Acre (on 36 in. rows)			
LEAFY PETIOLE VEGETABLES: Cal Florence fennel (including sweet anise, sweet fennel, finocchi SOIL APF Pests For control of: Aphids Leafhoppers	b), Rhubarb, Swiss chard PLICATIONS (FIELD)			
LEAFY PETIOLE VEGETABLES: Cal Florence fennel (including sweet anise, sweet fennel, finocchi SOIL APF Pests For control of: Aphids	o), Rhubarb, Swiss chard PLICATIONS (FIELD) Fluid ounces/Acre (on 36 in. rows)			

Application Methods

Apply specified dosage of this product in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment; OR
- 2. In-furrow spray directed on or below seed; OR
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient irrigation within 24 hours of application; OR
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting; OR
- 5. Post-seeding drench, transplant-water drench, or hill drench; OR
- 6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

Restrictions

Pre-Harvest Interval (PHI): 45 days

Maximum amount of product allowed per crop season: 12.0 fluid ounces/Acre (0.38 lb. Al/A)

DO NOT use on crops grown for seed unless permitted by state approved 24(c) labeling.

LEGUME VEGETABLES (except Soybean, dry):

Edible podded and Succulent shelled pea and Bean and Dried Shelled Pea and Bean including:

Bean - Lupinus spp. (grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean - *Phaseolus* spp. (field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean) Bean - *Vigna* spp. (adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea - *Pis um* spp. (dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea) Other Beans and Peas - Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Sovbean (immature seed). Sword bean.

SOIL APPLICATIONS (FIELD)					
Pests	Fluid ounces/Acre				
For control of:					
Aphids					
Flea beetles					
Leafhoppers					
Whiteflies	8.0 – 12.0				
For suppression of disease symptoms of:					
Bean common mosaic virus (BCMV)					
Bean golden mosaic virus (BGMV)					
Beet curly top hybrigeminivirus (BCTV)					
	n Methods				
Apply specified dosage of this product in one of the following me					
1. Chemigation into root zone through low-pressure drip, tric					
2. In-furrow spray at planting directed on or below seed; Ol					
3. In a narrow (2" or less) surface band over seed-line during planting incorporated to a depth of 1 to 1.5" with sufficient					
irrigation within 24 hours following application; OR					
 In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting; OR As a post-seeding drench, transplant-water drench, or hill drench. 					
	ctions				
Pre-Harvest Interval (PHI): 21 days	cuons				
Maximum amount of product allowed per crop season: 12.0 flui	$d_{\text{ounces}}/\Delta cre(0.38 \text{ lb} \text{AI}/\Delta)$				
DO NOT use on crops grown for seed unless permitted by state					
	ATIONS (FIELD)				
Pests	Fluid ounces/Acre				
For control of:					
Aphids	4.4				
Leafhoppers 1.4					
Whiteflies					
	n Methods				
	ugh properly calibrated ground, aerial or chemigation application				
equipment. Thorough coverage of foliage is necessary.					
	ctions				
Pre-Harvest Interval (PHI): 7 days					
Minimum interval between applications: 7 days					
Maximum amount of product allowed per crop season: 4.2 fluid ounce (0.13 lb. Al/A)					
DO NOT use on crops grown for seed unless permitted by state	approved 24(c) labeling.				

ROOT VEGETABLES¹ – soil treatment except Sugarbeet including: Beet (garden) [†] , Burdock (edible) [†] , Carrot [†] , Celeriac [†] , Chervil (turnip-rooted) [†] , Chickory [†] , Ginseng, Horseradish, Parsley (turnip-rooted), Parsnip [†] , Radish [†] , Oriental radish (diakon) [†] , Rutabaga [†] , Salsify (black) [†] , Salsify (oyster plant), Salsify (Spanish), Skirret, Turnip [†]						
Pests						
For control of: 0.35 – 0.85 5.0 – 12.0 Thrips (foliage feeding only) Whiteflies						
	Restrictions					
 Pre-Harvest Interval (PHI): 21 days Maximum amount of product allowed per crop season when making soil applications: 12 fluid ounces/Acre (0.38 lb. Al/A) Maximum applications per crop season: 1 ¹ Not for use on crops grown for seed unless permitted by state approved 24(c) labeling. Application Methods						
 Apply specified dosage of this product in one of the following methods: Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment; OR In-furrow spray (rate specified per 1,000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting; OR In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting. 						
Remarks						
Important Note: The rate applied affects the length of control. Use higher specified rates within the rate range where infestations occur later in crop development, or where pest pressure is continuous. Rates of this product less than 0.7 fluid ounce/1,000 row-feet will not provide adequate residual pest control. Crops treated with this product grown on very high organic matter soils (muck) may also require additional pest management control. [†] The tops or greens from these crops may be utilized for food or feed.						
Carrot [†] , Celeriac [†] , Chervil (turnip-roote		et including: Beet (garden) [†] , Burdock (edible) [†] , Parsley (turnip-rooted), Parsnip [†] , Radish [†] , Oriental				

Tadish (diakon) ', Rulabaga', Saisily (black) ', Saisily (byste	er plant), Saisity (Spanish), Skirret, Turnip
Pests	Fluid ounces/Acre
For control of:	1.4
Aphids, Flea beetles, Leafhoppers, Whiteflies	
	Restrictions

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum amount of product allowed per crop season when making foliar applications: 1.4 fluid ounces/Acre (0.044 lb. Al/A) on Radish, 4.2 fluid ounces per acre (0.13 lb. Al/A) on all other crops
- Maximum applications per crop season: 1 on Radish; 3 on all other crops

¹ Not for use on crops grown for seed unless permitted by state approved 24(c) labeling.

Application Methods

 Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant to improve coverage. This product may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved control of other pests.

[†] The tops or greens from these crops may be utilized for food or feed.

Arrowroot, Artichoke (Chinese and Jer	usalem), Canna (edible, Queensland arro	t Potato) – soil treatment: Arracacha, pwroot), Cassava (bitter and sweet) [†] , Chayote (root), ic, Yam bean (jicama, manoic pea), Yam (true) [†]
Pests	Fluid ounces/1,000 row ft.	Fluid ounces/Acre
For control of: Aphids Flea beetles Leafhoppers Thrips (foliage feeding only)	0.35 – 0.85	5.0 – 12.0

Whiteflies				
		Restrictions		
Maximum applications per crop se ¹ Not for use on crops grown for se	wed per crop seasor eason: 1 seed unless permitte A	3 days (leaves); 125 n when making soil a ed by state approved Application Methods	applications: 12 fluid ounces/Acre (0.38 lb. Al/A) 24(c) labeling.	
depth at planting; OR	oduct in one of the fo er 1,000 row-feet) o	ollowing methods: over planting materia	als (hulis) or, shanked-in 1 to 2 inches below hulis 45 days after planting. Observe the same PHI as	
		Remarks		
Important Note: The rate applied affects the length of control. Use higher specified rates within the rate range where infestations occur later in crop development, or where pest pressure is continuous. Rates of this product less than 0.35 fluid ounce/1,000 row-feet will not provide adequate residual pest control. Crops treated with this product grown on very high organic matter soils (muck) may also require additional pest management control.				
[†] The tops or greens from these of	rops may be utilized	d for food or feed.		
Arrowroot, Artichoke (Chinese and Jeru Chufa, Dasheen (taro) [†] , Ginger, Leren, S Pests	salem), Canna (edib	ole, Queensland arrov	ot Potato) – foliar treatment: Arracacha, wroot), Cassava (bitter and sweet) [†] , Chayote (root), ic, Yam bean (jicama, manoic pea), Yam (true) [†] Fluid ounces/Acre	
For control of: 1.4 Aphids, Flea beetles, Leafhoppers, Whiteflies 1.4				
Aprilds, Flea beelles, Leainoppers, Whiteliles Restrictions				
 Pre-Harvest Interval (PHI): 7 days Minimum interval between applications: 5 days Maximum amount of product allowed per crop season when making foliar applications: 4.2 fluid ounces per acre (0.13 lb. Al/A) on all other crops Maximum applications per crop season: 3 on all crops Not for use on crops grown for seed unless permitted by state approved 24(c) labeling. Application Methods Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant to improve coverage. This product may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Tank mix this product with other insecticides for knockdown of pests or for improved 				
control of other pests.				
Remarks † The tops or greens from these crops may be utilized for food or feed.				
SUGARBEET: (Californi	a only)			
SOIL APPLICATIONS (FIELD)				
Pests			Fluid ounces/Acre	
For control of: Aphids Flea beetles				
Leafhoppers Whiteflies			3.0 - 6.0	
For suppression of disease sympton Western yellows virus Beet curly top hybrigeminivirus (BCTV	()			
Apply appairies described to the second		ication Methods		
Apply specified dosage of this product i Apply specified dosage in sufficient ca during the bedding operation immediate	rrier volume to ensu	ure uniform applicati or at the time of plar	on. Apply directly below each seed furrow either nting.	
The low rate may be applied to aid esta	ablishment of stand	Remarks	r for early season control of the other nests listed	
		The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed. Restrictions		

Maximum amount of product allowed per calendar year: **6.0 fluid ounces/Acre** (0.19 lb. Al/A) **DO NOT** apply during bloom or within 10 days prior to bloom or when bees are foraging. **DO NOT** use on crops grown for seed unless permitted by state approved 24(c) labeling.

	NUPRID [®] 4F INSECTICIDE CONVERSION CHART FOR LINEAR APPLICATION ONLY									
RATE fluid ounces/ Acre		RATE fluid ounces/1,000 row-feet Based on <u>average</u> row spacing (in inches):								
	10	15	20	25	30	34	36	38	40	45
5.0	0.10	0.14	0.19	0.24	0.29	0.33	0.34	0.36	0.38	0.43
5.5	0.11	0.16	0.21	0.26	0.32	0.36	0.38	0.40	0.42	0.47
6.0	0.11	0.17	0.23	0.29	0.34	0.39	0.41	0.44	0.46	0.52
6.5	0.12	0.19	0.25	0.31	0.37	0.42	0.45	0.47	0.50	0.56
7.0	0.13	0.20	0.27	0.33	0.40	0.46	0.48	0.51	0.54	0.60
7.5	0.14	0.22	0.29	0.36	0.43	0.49	0.52	0.55	0.57	0.65
8.0	0.15	0.23	0.31	0.38	0.46	0.52	0.55	0.58	0.61	0.69
8.5	0.16	0.24	0.33	0.41	0.49	0.55	0.59	0.62	0.65	0.73
9.0	0.17	0.26	0.34	0.43	0.52	0.59	0.62	0.65	0.69	0.77
9.5	0.18	0.27	0.36	0.45	0.55	0.62	0.65	0.69	0.73	0.82
10.0	0.19	0.29	0.38	0.48	0.57	0.65	0.69	0.73	0.77	0.86
10.5	0.20	0.30	0.40	0.50	0.60	0.68	0.72	0.76	0.80	0.90
11.0	0.21	0.32	0.42	0.53	0.63	0.72	0.76	0.80	0.84	0.95
11.5	0.22	0.33	0.44	0.55	0.66	0.75	0.79	0.84	0.88	0.99
12.0	0.23	0.34	0.46	0.57	0.69	0.78	0.83	0.87	0.92	1.03
12.5	0.24	0.36	0.48	0.60	0.72	0.81	0.86	0.91	0.96	1.08
13.0	0.25	0.37	0.50	0.62	0.75	0.85	0.90	0.95	0.99	1.12
13.5	0.26	0.39	0.52	0.65	0.77	0.88	0.93	0.98	1.03	1.16
14.0	0.27	0.40	0.54	0.67	0.80	0.91	0.96	1.02	1.07	1.21

Important Note: Rate of this product applied affects the length of control and, to a considerable extent, the degree of control or effect. Row-spacing rate combinations in shaded blocks may not provide adequate residual pest control and are not recommended for long-term, residual control. Use higher labeled rates where infestations may occur later in crop development or where pest pressure is continuous. Nufarm offers no warranty for use of this product at rates below 0.35 fluid ounce/1,000 row- feet (the Row-Spacing/Rate combinations that are shaded).

BERRY, BUSH and VINE CROPS

For control of:	
Aphids Application Methods Whiteflies Application Methods Apply specified dosage of this product in one of the following methods: 1. Chemigation into root zone through low-pressure drip, trickle, micro-spring	l ounces/Acre
Apply specified dosage of this product in one of the following methods: 1. Chemigation into root zone through low-pressure drip, trickle, micro-spri	12.0 – 16.0
1. Chemigation into root zone through low-pressure drip, trickle, micro-spri	
 As a plant material or plant hole treatment just prior to, or during transplan As a pre-plant band spray over the row in a minimum of 20 gallons of wa 	ting; OR

into root zone.				
Remarks				
The rate applied affects the length of control. Use higher specified rates within the rate range where infestations may occur later in crop development or where pest pressure is continuous.				
	rictions			
Pre-Harvest Interval (PHI): 14 days				
Maximum amount allowed per crop season: 16.0 fluid ounce	Acre (0.50 lb. Al/A)			
DO NOT apply during bloom or within 10 days prior to bloom o				
DO NOT make both a soil and foliar application on the same cro				
DO NOT use on crops grown for seed unless allowed by state a				
SOIL APPLICATIONS (post-h	arvest use on perennial varieties)			
Pests	Fluid ounces/Acre			
For control of:				
White grub complex				
(grubs of Asiatic garden beetle, European and	8.0 – 12.0			
Masked chafer, Japanese beetle, Oriental beetle)				
	on Methods			
Apply a single application post harvest to coincide with rer				
period of beetles. Apply specified dosage of this product in one				
1. As a ground spray via boom or backpack sprayer in a m	nimum of 20 gallons of water per acre: OR			
	t based on the treated row band area in proportion to the amount			
required per full acre. The bandwidth must be equivalent				
3. As a chemigation application with 600 to 1,000 gallons of				
Remarks				
-				
All soil-surface applications must be followed by 0.25 inch of rainfall or overhead irrigation water per acre within 2 hours of application. Failure to adequately incorporate this product into egg-deposition zone may result in decreased activity of beetle grubs.				
Restrictions				
Maximum amount allowed per calendar year: 12.0 fluid ounce				
FOLIAR APPLICATIONS				
Pests	Fluid ounces/Acre			
For control of:				
Aphids	4.5			
Spittlebugs	1.5			
Whiteflies				
Application Methods				
Apply this product as a broadcast or directed spray method through properly calibrated ground, aerial or chemigation application				
equipment. Thorough coverage of foliage is necessary.				
	marks			
All soil-surface applications must be followed by 0.25 inch of rainfall or overhead irrigation water per acre within 2 hours of application.				
Failure to adequately incorporate this product into egg-deposition zone may result in decreased activity of beetle grubs.				
Restrictions				
Pre-Harvest Interval (PHI): 7 days				
Minimum interval between applications: 5 days				
Maximum amount of product allowed per crop season: 4.6 fluid ounces/Acre (0.14 lb. Al/A)				
DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.				
DO NOT make both a soil and foliar application on the same crop in the same season.				
DO NOT use on crops grown for seed unless allowed by state approved 24(c)labeling.				
BUSHBERRY: Blueberry, Currant, Elderberry, Goo	seberry, Huckleberry, Juneberry, Ligonberry, Salal			
SOIL APPLICATIONS				
SOIL API				
SOIL API				

Pests	Fluid ounces/Acre		
For control of:			
Japanese beetle			
(adults, feeding on foliage)	8.0 - 16.0		
White grub complex	0.0 - 10.0		
(grubs of Asiatic garden beetle, European and Masked chafer,			
Japanese beetle and Oriental beetle)			
Application Methods			
Apply specified dosage of this product in one of the following methods:			
1. Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment; OR			
2. 18-inch band on each side of the row followed with 0.25 inch of irrigation immediately after application.			
Remarks			

For grub control, apply this product to control 1st or 2nd (early) instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st. For control of Japanese beetle larvae, make applications from June 1 to July 15. **DO NOT** apply during bloom.

Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root zone will help protect berry plant roots from grub feeding. Apply this product to moist soil. If necessary, apply one hour of irrigation water immediately before application. To ensure maximum efficacy, 0.5 to 1 inch of irrigation water or rainfall must be applied or received within 24 hours of application of this product to facilitate movement into the soil and into the root zone.

Pre-Harvest Interval (PHI): 7 days

Maximum amount of product allowed per calendar year: **16.0 fluid ounces/Acre (0.50 lb. Al/A) DO NOT** apply pre-bloom or during bloom or when bees are foraging.

FOLIAR APPLICATIONS			
Pests	Fluid ounces/Acre		
For control of:			
Aphids	1.2 – 1.6		
Leafhoppers/Sharpshooters			
For control of:			
Japanese beetles (adults)	2.4 – 3.2		
Thrips (foliage feeding)			
For control of:	3.2		
Blueberry maggot	5.2		
Application Methods			
Apply this product as a broadcast or directed spray method through properly calibrated ground, aerial or chemigation application			
equipment. Thorough coverage of foliage is necessary.			
Res	trictions		
Pre-Harvest Interval (PHI): 3 days			
Minimum interval between applications: 7 days			
Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.5 lb. Al/A)			
Maximum number of product applications per calendar year: 5			
Maximum application volume (water): Ground: 20.0 GPA; Air: 5.0 GPA			
DO NOT apply pre-bloom or during bloom or when bees are foraging.			

CANEBERRY: Blackberry (*Rubus eubatus,* including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these). Raspberry (black and red, *Rubus occidentalis, Rubus strigosus, Rubus idaeus*).

SOIL APPLICATIONS			
Pests Fluid ounces/Acre			
For control of:			
Aphids	8.0 - 16.0		
Leafhoppers	0.0 10.0		
Whiteflies			
For control of:	12.0 – 16.0		
Rednecked cane borer	12.0 10.0		
For suppression of:	16.0		
Thrips (foliage-feeding only)			
•	pplication Methods		
Apply specified dosage in one of the following methods:			
	drip, trickle, micro-sprinkler or equivalent equipment; OR		
2. Basal, soil drench in a minimum of 500 gallons s			
	Restrictions		
Pre-Harvest Interval (PHI): 7 days			
Maximum amount of product allowed per calendar year:			
DO NOT apply during bloom or within 10 days prior to b			
FOLIAR APPLICATIONS ¹			
Pests	Fluid ounces/Acre		
For control of:			
Aphids	3.2		
Leafhoppers	5.2		
For suppression of:			

Thring (foliage fooding only)			
Thrips (foliage-feeding only)			
Application Methods			
Apply this product as a broadcast or directed spray method through pro	perly calibrated ground, aerial or chemigation application		
equipment. Thorough coverage of foliage is necessary.			
Restrictions			
Pre-Harvest Interval (PHI): 3 days			
Minimum interval between applications: 7 days			
Maximum amount of product allowed per season: 16.0 fluid ounces/Ac	re (0.5 lb. Al/A)		

DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging. ¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling.

CRANBERRY

SOIL	APPLICATIONS	
Pests Fluid ounces/Acre		
For control of: Rootgrubs (Scarab)	8.0 – 16.0	
Rootworms (Chrysomelid)	cation Methods	
Apply this product to moist soil. Apply specified dosage of the	nis product in one of the following methods: bot and crown area using a minimum of 20 gal of water per acre; OR	
Immediately upon application, this product must be incorporated into root zone by 0.1 to 0.3 inch water/Acre, either with the chemigation application or through irrigation/rainfall if not applied through chemigation. Inadequate incorporation within 24 hours of application may result in reduced control.		
Make application post-bloom immediately after honeybees are removed. Application should target early instar larvae.		
	Remarks	
Best control may be achieved when application is made post-bloom immediately after bees are removed. Target early instar larvae. This product has not been tested for crop response in tank mixes with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of this product and the desired fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate crop response within 48 hours and for at least two weeks prior to utilizing the tank mix on larger acreage. If crop injury results from the premix test, do not apply the tank mix to larger acreage.		
Restrictions		
Pre-Harvest Interval (PHI): 30 days Maximum amount of product allowed per calendar year: 16 DO NOT apply during bloom or within 10 days prior to bloo		

S	SOIL APPLICATIONS
Pests	Fluid ounces/Acre
For control of:	
European fruit lecanium	
Leafhoppers/Sharpshooters	8.0 – 16.0
Mealybugs	
Phylloxera spp. ¹	
For suppression of:	
Grapeleaf skeletonizer	
Nematodes ²	16.0
For suppression of disease symptoms of :	
Pierce's disease	
l l	Application Methods
Apply specified dosage of this product in one of the foll	lowing methods:
1. Chemigation into root zone through low-pressur	re drip, trickle, micro-sprinkler or equivalent equipment; OR
2. Subsurface side-dress shanked into the root zo	one on both sides of the plants followed by irrigation; OR
3. Hill drench in sufficient water to ensure incorpo	ration into the root zone followed by irrigation.
	Remarks
Make application between bud-break and the pea-berry	/ stage. A total of 14 fluid ounces/acre is required under the following
conditions:	
1. Where vigorous vine growth is expected	
2. In warmer growing areas	

3. Where mealybug and European fruit lecanium populations are expected to be heavy

- 4. Where vine populations exceed 600 per acre, or;
- 5. For suppression of nematodes

¹ Repeated and regular use of this product over multiple consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

²For suppression of nematodes, apply 14 fluid ounces in a single application or two 7-fluid ounce applications on a 30 to 45-day interval. Only make treatments by 1) chemigation into root zone through above ground low pressure drip, tickle, micro sprinkler or equivalent equipment or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root zone of the plant. Repeated and regular use of this product over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

 Restrictions

 Pre-Harvest Interval (PHI): 30 days

 Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.5 lb. Al/A)

 FOLIAR APPLICATIONS

 FOLIAR APPLICATIONS

 For control of:

 Leafhoppers/Sharpshooters
 1.2 – 1.6

 Mealybugs
 1.6

 Application Methods

Apply specific dosage of this product using properly calibrated ground application equipment only. Apply as a broadcast or directed spray to infested areas ensuring thorough coverage.

Restrictions

Pre-Harvest Interval (PHI): **0 days** Minimum interval between applications: **14 days**

Maximum amount of product allowed per calendar year: 3.2 fluid ounces/Acre (0.1 lb. Al/A)

HOPS:			
SOIL APPLICATIONS			
Pests Fluid ounces/Acre			
For control of: Aphids	9.6		
	cation Methods		
 Apply specified dosage of this product in one of the following methods: Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment; OR Subsurface side-dress shanked into the root zone on both sides of the plants followed by irrigation; OR Hill drench in sufficient water to ensure incorporation into the root zone followed by irrigation. 			
Pre-Harvest Interval (PHI): 60 days Maximum amount of product allowed per calendar year: 9.6 fluid ounces/Acre (0.3 lb. Al/A)			
FOLIAR APPLICATIONS			
Pests	Fluid ounces/Acre		
For control of: Aphids	3.2		
Application Methods			
Apply this product as a broadcast or directed spray method through properly calibrated ground, aerial or chemigation application equipment. Thorough coverage of foliage is necessary.			
Restrictions			
Pre-Harvest Interval (PHI): 28 days			
Minimum interval between applications: 21 days Maximum amount of product allowed per calendar year: 9.6 fluid ounces/Acre (0.3 lb. Al/A)			

COFFEE:		
SOIL	APPLICATIONS	
Pests	Fluid ounces/Acre	
For control of:		
Aphids		
Leafhoppers	8.0 - 16.0	
Leafminers	0.0 - 10.0	
For suppression of:		
Scales		
Appl	ication Methods	
Apply specified dosage in one of the following methods:		
1. Chemigation into root zone through low-pressure dri	ip, trickle, micro-sprinkler or equivalent equipment.; OR	
2. Subsurface side-dress shanked into the root zone o	on both sides of the plants followed by irrigation.; OR	
3. Basal, soil drench in sufficient water to ensure incor	poration into the root zone followed by irrigation.	
F	Restrictions	
Pre-Harvest Interval (PHI): 7 days		
Maximum amount of product allowed per calendar year: 16	6.0 fluid ounces/Acre (0.5 lb. Al/A)	
DO NOT apply during bloom or within 10 days prior to bloc	om or when bees are foraging.	
FOLIA	RAPPLICATIONS	
Pests	Fluid ounces/Acre	
For control of:		
Aphids		
Leafhoppers	3.2	
Whiteflies	0.2	
For suppression of:		
Scales		
	ication Methods	
	ugh properly calibrated ground, aerial or chemigation application equipment.	
Thorough coverage of foliage is necessary.		
F	Restrictions	
Pre-Harvest Interval (PHI): 7 days		
Minimum interval between applications: 7 days		
Maximum amount of product allowed per calendar year: 16	6.0 fluid ounces/Acre (0.5 lb. Al/A)	
DO NOT a why device a black and a weight in 40 days a wight black	and an and and have a set for a single	

DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

CITRUS, TREE NUT and ORCHARD CROPS

CITRUS (containerized): Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

SOIL APPLICATIONS			
Pests	mL/0.1ft ³ of container media		
For control of:			
Aphids			
Asian citrus psyllid			
Black fly			
Citrus leafminer Leafhoppers/Sharpshooters	0.38-0.58		
Mealybugs			
Scales			
Whiteflies			
Citrus root weevil (larval complex) ¹			
For suppression of :	0.58		
Citrus thrips (foliage-feeding only)	0.58		
Appl	ication Methods		
Determine volume of container and calculate dosage nec	essary to treat container. Apply calculated dosage of this product per		
	o or trickle irrigation water. Use sufficient carrier volume to ensure		
	ut loss of gravitational water from the container. For optimal results,		
treatment must be made at planting prior to insect infestation. Retreat if necessary.			

Application Restrictions

Pre-Harvest Interval (PHI): **0 day** Maximum allowed per application: **0.58 mLs/0.1 ft³ container media** Maximum allowed per crop season: **3.5 mLs/plant** Do not apply pre-bloom or during bloom or when bees are foraging.

Remarks

¹For control of larvae of the citrus root weevil complex, make application prior to neonate larvae entering potting media. Utilize specified higher dosage for heavy infestations.

CITRUS: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

SOIL APPLICATIONS			
Pests		Fluid ounces/Acre	
For control of:			
Aphids			
Asian citrus psyllid			
Black fly			
Citrus leafminer		8.0 - 16.0	
Leafhoppers/Sharpshooters		0.0 - 10.0	
Mealybugs			
Scales			
Termites (FL only)			
Whiteflies			
For suppression of:			
Citrus nematode			
Thrips (foliage-feeding thrips only)		16	
For suppression of disease symptoms	of:	10	
Citrus tristeza virus (CTV) through vector	control		
Citrus yellows			
	Application Me	ethods	
Apply specified dosage of this product in	one of the following method	ls:	
		micro-sprinkler or equivalent equipment. Apply to newly	
planted trees or those previously tra	ained to drip, trickle or micro-	-sprinkler irrigation. Soil must be lightly pre-wetted to break	
		pation application can be made separate to normal irrigation	
but followed by 10 to 20 minutes of	additional watering to move	e this product into root zone. Allow 24 hours before initiating	
subsequent irrigations; OR	C C		
2. Soil surface band spray on both sid	es of the tree. Bands must o	overlap at the tree base to create a continuous band within the	
		sprinkler irrigation sufficient to move the product into the	
upper portion of the root zone. This method is suitable for very coarse soils with 0.75% organic matter or less; OR			
3. Drench to base of tree not exceeding one quart total solution per tree immediately around trunk of tree and extending outward			
covering the entire fibrous root sys			
		ge in 1 to 4 quarts of total solution volume, depending on size	
of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree			
trunk; OR			
	apply specific dosage throug	gh low pressure chemigation or soil surface spray only,	
		cation directions stated above for the respective application	
		consecutive growing seasons provides the greatest degree of	
nematode suppression and yields th		5 5 1 5 5	
	Restrictio	ons	
Pre-Harvest Interval (PHI): 0 days			
Maximum amount of product allowed per	calendar vear: 16.0 fluid o	ounces/Acre (0.5 lb. Al/A)	
DO NOT apply during bloom or within 10			
FOLIAR APPLICATIONS			
Pests	Fluid ounces/100 gallo		
For control of:	Thata Guildes, Too gail		
Aphids Asian citrus psyllid			
Black fly		4.0 - 8.0	
Leafhoppers/Sharpshooters	1.4 – 2.0	(depending on tree size, target pest, and infestation	
Leafminers	(dilute application)		
Mealybugs		pressure/	
Scales ¹			
Whiteflies			
VVIIICEIIICS		I	

		-	
For suppression of:	2.0	9.0	
Thrips (foliage-feeding thrips only)		8.0	
	Application Methods	·	
		sted area ensuring thorough coverage. Apply	
through properly calibrated ground or aer	ial equipment.		
	Remarks		
Aerial application of this product may result in slower activity and reduced control compared to ground application. Where higher rate applications are appropriate, increase the spray solution concentration to apply an equivalent rate per acre to that applied in the diluted application. The 8.0 fluid ounce/Acre rate is based on full sized trees. This rate may be reduced proportionally for smaller trees. ¹ Scales - time applications to the crawler stage. Treat each generation.			
Restrictions			
Pre-Harvest Interval (PHI): 0 days			
Minimum interval between sprays: 10 days			
Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.5 lb. Al/A)			
DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.			

POME FRUIT: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince			
		PLICATIONS	
Pests	Pests		Fluid ounces/Acre
For control of: Aphids (including Wooly apple aphid) Leafhoppers		8.0 – 12.0	
		ion Methods	
Apply specified dosage of this product in the micro-sprinkler or equivalent) equipment.		0	into root-zone through low-pressure (drip, trickle,
	Rest	trictions	
Pre-Harvest Interval (PHI): 21 days Maximum amount of product allowed per calendar year: 12.0 fluid ounces/Acre (0.38 lb. Al/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging. FOLIAR APPLICATIONS			
Pests	Fluid ounces/10	0 gallons	Fluid ounces/Acre
For control of: Leafhoppers	0.4 - 0.8		1.6 – 3.2
For control of: Aphids (except Woolly apple aphid) Apple maggot Leafminers San Jose scale	0.8		3.2
For use on Pears Only to control: Mealybugs Pear psylla	2.0		8.0
Application Methods			
Apply specific dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. Apply this product through properly calibrated ground or aerial equipment.			
Remarks			
Combine applications targeting apple maggot with manufacturer's specified rate of a sticker.			
Pre-Harvest Interval (PHI): 7 days Minimum interval between sprays: 10 day Maximum amount of product allowed per o DO NOT apply during bloom or within 10 d	ys calendar year: 16.0 f		

POMEGRANATE				
SOIL APPLICATIONS				
Pests	Fl	uid ounces/Acre		
For control of: Aphids Leafhoppers/Sharpshooters		8.0 – 16.0		
Whiteflies				
Α	pplication Methods			
Apply specified dosage of this product in the following n micro-sprinkler or equivalent) equipment.		e through low-pressure (drip, trickle,		
	Restrictions			
Pre-Harvest Interval (PHI): 0 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b	r: 16.0 fluid ounces/Acre (0.5 lb. bloom or when bees are foraging.	AI/A)		
FO	LIAR APPLICATIONS			
Pests	Flu	id ounces/Acre		
For control of:				
Aphids Leafhoppers/Sharpshooters Whiteflies		3.2		
For suppression of: Scales	-			
А	pplication Methods			
Apply specific dosage of this product as a broadcast or product through properly calibrated ground or aerial equ		suring thorough coverage. Apply this		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea		N/A)		
Pre-Harvest Interval (PHI): 7 days Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including sweet and dried)	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging.			
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swe Japanese), Plumcot, Prune (fresh and dried)	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu	·		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swe Japanese), Plumcot, Prune (fresh and dried)	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS	m (including Chickasaw, Damson and		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swe Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of:	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS	m (including Chickasaw, Damson and 10 gallons root dip solution		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swe Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots)	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS Fluid ounces/	m (including Chickasaw, Damson and		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) A Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment.	r: 9.6 fluid ounces/Acre (0.3 lb. A ploom or when bees are foraging. eet and tart), Nectarine, Peach, Plu TROOT DIP APPLICATIONS Fluid ounces/ pplication Methods as of water. Thoroughly wet bare-ro 5 minutes. Allow solution to dry or	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including sweet Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment.	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS Fluid ounces/ pplication Methods is of water. Thoroughly wet bare-ro 5 minutes. Allow solution to dry or DIL APPLICATIONS	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) A Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment. Se Pests For control of:	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS Fluid ounces/ pplication Methods is of water. Thoroughly wet bare-ro 5 minutes. Allow solution to dry or DIL APPLICATIONS	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as Iuid ounces/Acre		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) A Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment.	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS Fluid ounces/ pplication Methods is of water. Thoroughly wet bare-ro 5 minutes. Allow solution to dry or DIL APPLICATIONS	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) A Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment. Se Pests For control of: Aphids (including Wooly apple aphid) Leafhoppers	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS Fluid ounces/ pplication Methods o 5 minutes. Allow solution to dry or DIL APPLICATIONS Fluid ounces/ pplication Methods	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as Iuid ounces/Acre 8.0 – 12.0		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) A Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment. Se For control of: Aphids (including Wooly apple aphid) Leafhoppers A Apply specified dosage of this product in the following reference.	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu T ROOT DIP APPLICATIONS Fluid ounces/ pplication Methods o 5 minutes. Allow solution to dry or DIL APPLICATIONS Fluid ounces/ pplication Methods pplication Methods nethod: Chemigation into root zone	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as Iuid ounces/Acre 8.0 – 12.0		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment. St For control of: Aphids (including Wooly apple aphid) Leafhoppers Apply specified dosage of this product in the following r micro-sprinkler or equivalent equipment. Pre-Harvest Interval (PHI): 21 days Maximum amount of product allowed per calendar yea	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu TROOT DIP APPLICATIONS Fluid ounces/ pplication Methods as of water. Thoroughly wet bare-ro 5 minutes. Allow solution to dry or OIL APPLICATIONS Fluid ounces/Acre (0.38 lb r: 12.0 fluid ounces/Acre (0.38 lb	In (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as Iuid ounces/Acre 8.0 – 12.0 e through low-pressure drip, trickle,		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment. St For control of: Aphids (including Wooly apple aphid) Leafhoppers Apply specified dosage of this product in the following r micro-sprinkler or equivalent equipment. Pre-Harvest Interval (PHI): 21 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b	r: 9.6 fluid ounces/Acre (0.3 lb. A bloom or when bees are foraging. eet and tart), Nectarine, Peach, Plu TROOT DIP APPLICATIONS Fluid ounces/ pplication Methods as of water. Thoroughly wet bare-ro 5 minutes. Allow solution to dry or OIL APPLICATIONS Fluid ounces/Acre (0.38 lb r: 12.0 fluid ounces/Acre (0.38 lb	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as Iuid ounces/Acre 8.0 – 12.0 e through low-pressure drip, trickle,		
Minimum interval between sprays: 7 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b STONE FRUIT: Apricot, Cherry (including swee Japanese), Plumcot, Prune (fresh and dried) PRE-PLAN Pests For control of: Black peach aphid (infesting roots) Mix this product at a rate of 1.0 fluid ounce per 10 gallor union by soaking roots in this product's solution for up to possible following treatment. St For control of: Aphids (including Wooly apple aphid) Leafhoppers Apply specified dosage of this product in the following r micro-sprinkler or equivalent equipment. Pre-Harvest Interval (PHI): 21 days Maximum amount of product allowed per calendar yea DO NOT apply during bloom or within 10 days prior to b	r: 9.6 fluid ounces/Acre (0.3 lb. A ploom or when bees are foraging. eet and tart), Nectarine, Peach, Plu TROOT DIP APPLICATIONS Fluid ounces/ pplication Methods as of water. Thoroughly wet bare-ro 5 minutes. Allow solution to dry or DIL APPLICATIONS Fluid ounces/Acre (0.38 lb ploom or when bees are foraging.	m (including Chickasaw, Damson and 10 gallons root dip solution 1.0 ot transplant to slightly above the graft n roots and transplant trees as soon as Iuid ounces/Acre 8.0 – 12.0 e through low-pressure drip, trickle,		

lawawaa kaatla				
Japanese beetle				
Leafhoppers/Sharpshooters				
Plant bugs				
Rose chafer				
San Jose scale				
For control of:	2.4 – 3.2			
Cherry fruit fly (maggot of Eastern & Western)				
For suppression of:				
Plum curculio	3.2			
Stinkbugs				
Application Methods				
Apply specific dosage of this product as a broadcast o	or directed spray to infested area ensuring thorough coverage. Apply this			
product through properly calibrated ground or aerial equ	Jipment.			
Restrictions				
Apricot, Nectarine, Peach:				
Pre-Harvest Interval (PHI): 0 days				
Minimum interval between applications: 7 days				
Maximum amount of product allowed per crop season:	9.6 fluid ounces/Acre (0.30 lb. Al/A)			
Minimum application volume (water): Ground: 50 GPA; Air: 25 GPA				
DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging.				
Cherry, Plum, Plumcot, Prune:				
Pre-Harvest Interval (PHI): 7 days				
Minimum interval between applications: 10 days				
Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.50 lb. Al/A)				
Minimum application volume (water): Ground: 50 GPA				
DO NOT apply during bloom or within 10 days prior to b				

TREE NUTS except Almonds: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory				
nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)				
SOIL A	PPLICATIONS			
Pests	Fluid ounces/Acre			
For control of:				
Aphids				
Leafhoppers/Sharpshooters				
Mealybugs	8.0 - 16.0			
Spittlebugs	0.0 10.0			
Termites				
Whiteflies				
For suppression of:				
Thrips (foliage-feeding only)	10.0			
For suppression of disease symptoms of:	16.0			
Pecan scab (from reduction in honeydew deposition)				
Application Methods				
Apply specified dosage prior to or at onset of pest infestation in one of the following methods:				
1. Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. Pre-wet soil prior to				
applications of this product and allow soil to dry following application and prior to subsequent irrigation; OR				
2. Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site; OR				
3. Shank or subsurface side-dress, injected to a depth just above or just within the root zone and between the trunk and drip				
	f 10 gallons per acre using multiple shanks on both sides of trees. Ensure			
	. Irrigation covering entire treated area must follow within 48 hours to			
promote uptake by root system; OR				
4. For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree				
trunk and surrounding soil in the immediate vicinity of the tree trunk. Utilize sufficient carrier volume to penetrate the soil to				
a depth of 18 to 24 inches. Allow soil to dry following treatment and prior to applying any irrigation.				
Remarks				
Use higher specified rates within the rate range when applied by shank or subsurface side-dress, used on larger trees, soils with high				
clay content, for high plant populations, and/or where extended control is desired. Under some conditions, control may not occur				
for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.				
Restrictions				
DO NOT apply in Almonds				
Pre-Harvest Interval (PHI): 7 days				

Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.50 lb. Al/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging. FOLIAR APPLICATIONS Pests Fluid ounces/Acre For control of: Aphids (except Black pecan aphid) Leafhoppers/Sharpshooters 1.4 - 2.8Phylloxera spp. (leaf infestations) Spittlebuas Whiteflies For control of: Black pecan aphid 3.2 Mealybugs San Jose scale¹ **Application Methods** Apply specific dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. Apply this product through properly calibrated ground or aerial equipment. Remarks ¹Applications for control of San Jose scale must be timed according to crawler stage, treating each successive generation. Two applications on a 10 to 14-day interval may be required to achieve control. Restrictions **DO NOT** apply in Almonds Pre-Harvest Interval (PHI): 7 days Minimum interval between applications: 6 days Maximum amount of product allowed per calendar year: 11.5 fluid ounces/Acre (0.36 lb. Al/A) Minimum application volume (water): Ground: 50 GPA; Air: 25 GPA DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

BANANA and PLANTAIN		
SOIL APPLICATIONS		
Pests	Fluid ounces/Acre	
For control of:		
Aphids		
Leafhoppers	8.0 – 16.0	
For suppression of:		
Scales		
	oplication Methods	
Apply specified dosage of this product in the following method: Chemigation into root-zone through low-pressure (drip, trickle,		
micro-sprinkler or equivalent) equipment.		
	Restrictions	
Pre-Harvest Interval (PHI): 0 days		
Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.50 lb. Al/A)		
FOLIAR APPLICATIONS		
Pests	Fluid ounces/Acre	
For control of:		
Aphids	3.2	
Leafhoppers	0.2	
Thrips		
Application Methods		
Apply specified dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. Apply this product through properly calibrated ground or aerial equipment.		
Remarks		
Aerial application of this product may result in slower activity and reduced control relative to results from ground application.		
Addition of an organosilicone adjuvant at a rate not to exceed 2.0 fluid ounces/100 gallons finished spray solution may improve		
coverage and pest control.		
Restrictions		
Pre-Harvest Interval (PHI): 0 days		
Minimum interval between applications: 14 days		
Maximum amount of product allowed per calendar year:	t 16.0 fluid ounces/Acre (0.5 lb. Al/A)	

TROPICAL FRUIT: Acerola, Atemoya, Avocado, Biriba, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu. SOIL APPLICATIONS Pests Fluid ounces/Acre For control of: Aphids Avocado lacebug 12.0 - 16.0Leafhoppers Whiteflies For suppression of: 16.0 Scales Thrips (foliage-feeding thrips only) **Application Methods** Apply specified dosage of this product in the following method: Chemigation into root-zone through low-pressure (drip, trickle, micro-sprinkler or equivalent) equipment. Restrictions Pre-Harvest Interval (PHI): 6 days Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.50 lb. Al/A) FOLIAR APPLICATIONS Pests Fluid ounces/Acre For control of: Aphids Leafhoppers/Sharpshooters Mealybugs Thrips 3.2 Whiteflies For suppression of: Thrips **Application Methods** Apply specific dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. Apply this product through properly calibrated ground or aerial equipment. Remarks Ground applications of this product are more effective than aerial applications. Restrictions Pre-Harvest Interval (PHI): 7 days Minimum interval between applications: 10 days Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.5 lb. Al/A) **DO NOT** apply during bloom or within 10 days prior to bloom or when bees are foraging.

OTHER CROPS

Christmas Trees				
SOIL APPLICATIONS				
Pests	Fluid ounces/Acre			
For control of: White grub complex (e.g., grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	8.0 – 16.0			
Application Methods				
Soil incorporation and movement of this product to the root zone is readily when applied to moist soil. Apply specified dosage in one				

SUB-LABEL A: COMMERCIAL AGRICULTURE

1.	Chemigation into root z	one through	low-pressure dri	p. trickle.	micro-sprinkler	or equivalent	equipment:	OR

18-inch band on each side of the row (small trees) to full broadcast application (large trees) followed by rainfall or 0.25 to 1 inch of irrigation within 12 hours after application.

Remarks		
Apply this product during adult flight activity, or up to mid-July, when first instar larvae are present.		
	Restrictions	
Maximum amount of product allowed per calendar year:	16.0 fluid ounces/Acre (0.50 lb. Al/A)	
	AR APPLICATIONS	
Pests	Fluid ounces/Acre	
For control of:		
Aphids 1.6 – 3.2 Adelgids		
Application Methods		
Apply specific dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. Apply this		
product through properly calibrated ground or aerial equipment.		
Remarks		
Ground applications of this product are more effective than aerial applications.		
For gall-forming adelgids, time applications to coincide with full bud-swell or first bud-break of earliest bud-breaking trees. Once		
galls form spraying this product is ineffective.		
Restrictions		
Minimum interval between applications: 7 days		
Maximum amount of product allowed per calendar year: 16.0 fluid ounces/Acre (0.5 lb. Al/A)		

Depley/Cetternue edu ()			
Poplar/Cottonwood: (including members of the genus <i>Populus</i> grown for pulp or timber)			
SOIL APPLICATIONS ¹			
Pests	Fluid ounces/Acre		
For control of:			
Aphids			
Cottonwood leaf beetle	8.0 – 16.0		
For suppression of:			
Phylloxerina popularia	nnliastion Mathada		
	pplication Methods		
Apply specified dosage of this product in one of the following			
 Chemigation through low-pressure drip irrigation; C For narrow row, cutting orchards/nurseries used fo 			
	r plant propagation, shank into root zone followed by adequate irrigation to		
recommended.	oil moisture level at application. Under dry conditions 0.25 inch/acre is		
lecommended.	Remarks		
For Cottonwood leaf beetle, protection against damage will c	occur when application is made early-season, when beetles first begin feeding.		
	er uptake. For <i>Phylloxerina</i> , apply early in the year, from break of dormancy		
through May.	ci uptake. Tor Thyloxenna, apply early in the year, northbreak of dormancy		
anough may.	Restrictions		
Maximum amount of product allowed per calendar year: 16.0			
¹ This use is not permitted in California unless otherwise dire			
	G/WHIP APPLICATIONS ¹		
	Soaking Solution		
Pests	Fluid ounces needed per 100 gallons		
For control of:	6.65 to 13.3 (unhydrated cuttings/whips)		
Cottonwood leaf beetle 13.3 to 20.0 (partially hydrated cuttings/whips)			
For suppression of:			
Aphids	13.3 (unhydrated cuttings/whips) 20.0 (partially hydrated cuttings/whips)		
Phylloxerina popularia 20.0 (partially hydrated cuttings/willps)			
Application Methods			
Apply this product in one of the following cuttings/whips soaking methods:			
1. For freshly cut (hydrated) cuttings/whips, soak plant material in specified solution concentration for 24 hours prior to cold			
storage. After removal from cold storage, plant as needed; OR			
2. For previously hydrated cuttings/whips removed from cold storage, allow plant material to reach room temperature and soak in			
specified solution concentration for 24 hours prior to planting.			
Take proper care in disposal of any residual soaking solution. Apply solution to existing trees or other registered crops as long as all			
product label precautions and restrictions are observed.			

SUB-LABEL A: COMMERCIAL AGRICULTURE

Remarks			
The moisture content prior to application of the cuttings/whips, the solution concentration and the length of soaking interval interact to affect the amount of product absorbed into plant material. For a constant soaking interval of 24 hours, dry cuttings/whips absorb a higher quantity of solution and require a lower concentration. Conversely, more hydrated cuttings/whips absorb less solution and require a higher concentration. Soaking of cuttings/whips must occur in a covered container in absence of UV light. Not all <i>Populus</i> sp. clones/varieties/hybrids have been tested for crop safety. Without specific knowledge about a particular <i>Populus</i> sp. clone/variety/hybrid, a small number of cuttings/whips of each must be treated and evaluated prior to commercial use. Restrictions Maximum amount of product allowed at plant per calendar year: 16.0 fluid ounces/Acre (0.5 lb. Al/A)			
¹ This use is not permitted in California unless otherwise			
FOL	IAR APPLICATIONS ¹		
Pests	Fluid ounces/Acre		
For control of: Aphids Leaf beetles	1.6 – 3.2		
Application Methods			
Apply this product as a broadcast or directed spray method through properly calibrated ground, aerial or chemigation application equipment. Thorough coverage of foliage is necessary.			
Remarks			
Ground application of this product is more effective than	Ground application of this product is more effective than aerial application for these crops.		
Restrictions			
Pre-Harvest Interval (PHI): 7 days Minimum interval between applications: 10 days Maximum amount of product allowed per season: 16.0 fluid ounces/Acre (0.5 lb. Al/A) DO NOT apply during bloom or with 10 days prior to bloom or when honeybees are foraging. ¹ Use as a foliar application to Poplar/Cottonwood is not permitted in California unless otherwise directed by state approved 24(c) labeling.			

COMMERCIAL POULTRY FACILITIES

T

POULTRY HOUSING STRUCTURES		
Pests	Fluid ounces / 1,000 ft ²	
For control of: Darkling beetles Hide beetles (Dermestids)	3.0 (90 ml)	
Applic	ation Methods	
Apply between flocks after de-caking and sanitation procedures have been completed. Apply as a spot, crack and crevice, or surface spray on floors, walls, and support beams of structure. Apply using a minimum of 1/2 to 2 gallons of spray mixture per 1000 square feet. To prepare the spray mixture, fill the spray tank with 1/2 the required amount of water, then add the specified amount of product. Add the remaining water while agitating or mixing. Maintain constant agitation while applying.		
Apply spray mixture to the entire footing including 1 foot up the wall above the footing, and in 3 to 4 foot wide bands directly beneath all feed lines. The areas beneath the feed lines typically harbor large numbers of adult and larval stages of the target pest when an infestation occurs. Measure these areas to determine the appropriate amount of spray mixture to apply. For structures that are prone to large infestations, treat the footings including 1 foot up the wall and the entire floor area of the structure.		
Cracks and crevice areas also are prone to large infestations of the target pest. Apply as a crack and crevice treatment around wall insulation or other areas that may harbor the target pest. If structures have supporting beams, treat the floor with a 1 foot band around each beam and apply 2 feet up the beam.		
For structures prone to extreme infestation, treat the entire structure with a broadcast application. Apply 3.0 fluid ounces in 2 gallons of water per 1000 square feet of surface. Apply as a broadcast spray to areas where litter has accumulated (floor, under feed and water lines, lower sections of walls, corners).		
Remarks		
In order to avoid problems with pest resistance to imidacloprid, rotate to an insecticide with a different mode of action every 2-3 flocks. Rotate between 3 different insecticide mode of action classes labeled for control of target pests during a calendar year.		
Restrictions		
DO NOT apply when birds are present or within 7 days of bird placement.		
DO NOT allow food or feed to be contacted by the spray. Remove feed and water from the treatment area before applying.		
When treating the perimeter, do not allow this product to contact plants in bloom if bees are foraging the treatment area.		

SUB-LABEL A: COMMERCIAL AGRICULTURE

Pests	Fluid ounces / Gallon	
For control of:	0.125 – 0.25	
Nuisance ants	(3/4 – 1.5 TSP)	
A	pplication Methods	
Apply as a crack and crevice or wall void treatment inside structures. Apply to cracks, crevices, drilled holes, onto walls, around entry points such as doors, windows, vents, eaves, soffits, and utility access openings. If nests are present in voids, apply into the void if possible. Apply evenly to treatment surfaces but not to the point of runoff. Apply to areas around the exterior of the structure where ants may be present (soil, turf, ornamental shrubs and plantings, and groundcover in close proximity to or touching the structure). For above-ground nests, such as in wood posts, decks, or fences, or in trees, spray into holes/openings where ants are traveling and on the wood surface.		
Restrictions		
DO NOT use for control of native or imported fire ants, harvester ants or pharaoh ants.		
Keep people and pets out of treated areas until sprays have dried.		

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. **DO NOT** walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

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

CONTAINER DISPOSAL [HANDLING]:

[Nonrefillable Containers 5 Gallons or Less]

Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse container (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 1/4 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

[Nonrefillable containers larger than 5 gallons]

Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

[Refillable containers larger 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 a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[Refillable containers for return to Nufarm]

Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Close all openings and replace all caps. Contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULARTRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BYWAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BYTHE BUYER, USER, OR ITS CUSTOMERS.TOTHE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

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(RV[mmddyy])

IMIDACLOPRID GROUP **4**A **INSECTICIDE**

NUPRID[®] 4F INSECTICIDE

A SYSTEMIC and FOLIAR INSECTICIDE FOR USE on LISTED ORNAMENTALS, FRUIT and NUT TREES, and VEGETABLE PLANTS grown in LAWN and LANDSCAPE AREAS, in GREENHOUSES, NURSERIES, and INTERIOR PLANTSCAPES.

ACTIVE INGREDIENT:		
Imidacloprid, 1 -[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imida	zolidinimine	40.4%
OTHER INGREDIENTS:		59.6%
Т	OTAL:	100.0%

Contains 4 pounds of imidacloprid per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-528 EPA EST. NO. _____

MANUFACTURED FOR NUFARM AMERICAS INC. **11901 SOUTH AUSTIN AVENUE** ALSIP, IL 60803



NET CONTENTS _____

____GALS. (_____ Liters)

[Nufarm: Grow a better tomorrow] [Grow a better tomorrow]

FIRST AID		
IF INHALED	 Move the 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	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. DO NOT give anything by mouth to an unconscious person. 	
IF IN EYES	 Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. 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 to 20 minutes. Call a poison control center or doctor for treatment advice. 	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

No specific antidote is available. Treat the patient symptomatically.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco, or using the toilet. Avoid contact with eyes or clothing. Wear protective eye wear. Wear long sleeved shirt and long pants, socks, shoes, and chemical resistant gloves made of butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton ≥14 mil.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made of butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton ≥14 mil.
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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.

USER SAFETY RECOMMENDATIONS

User must:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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

DO NOT apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. **DO NOT** apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates. This chemical demonstrates the properties and characteristics associated with

chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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.

Look for the bee hazard icon



in the Directions for Use for each

application site for specific use restrictions and instructions to protect bees and other insect 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 on to 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: <u>www.npic.orst.edu</u> or directly to EPA at: <u>beekill@epa.gov</u>

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

See individual sites for specific pollinator protection application restrictions. If none exist under the specific site, for foliar applications, follow these application directions for use for food/feed crops that are commercially grown ornamentals that are attractive to pollinators and for non-agricultural uses:

1. 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.
- 2. NON-AGRICULTURAL USE SITES



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:

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.

Shake well before using.

DO NOT apply when wind speed favors drift beyond the area intended for treatment.

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.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

- Chemical-resistant gloves made of butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton <u>></u>14 mil
- Shoes plus socks

NON-AGRICULTURAL 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, nurseries, or greenhouses.

• Keep children and pets off treated areas until sprays have dried.

PRODUCT INFORMATION

Thorough uniform coverage is necessary to achieve target pest control. A spray adjuvant may be used to improve coverage. This product may not knockdown established and heavy insect populations with a single application. Two applications may be required to achieve control; retreat if needed and as directed on this label. This product may be tank mixed with other insecticides as specified for knockdown of pests or for improved control of other pests.

Apply this product as a broadcast or directed spray application. Time applications to begin as target pest populations begin to build. Ensure that the treated area receives a thorough, uniform coverage of the spray solution. To improve coverage, a spray adjuvant may be added to the NUPRID® 4F Insecticide tank mix.

Apply using either ground equipment in a minimum spray volume of 10 gallons per acre or with aerial equipment in a minimum spray volume of 5 gallons of water per acre. Use adequate spray volumes and calibrated application equipment.

RESISTANCE: Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product must conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

Mix Preparation

To prepare the application mixture:

- 1. Fill the spray tank with a portion of the required amount of water and begin agitation.
- 2. Add the specified amount of NUPRID®4F Insecticide packets and allow packets to fully dissolve.
- 3. Fill the tank with the remaining water needed. Maintain sufficient agitation during mixing and application.

This product can be used with other pesticides and/or fertilizer solutions; refer to the Tank Mix and Compatibility Notes below. When tank mixtures of this product and other pesticides are involved, prepare the tank mixture as specified above and follow the suggested Mixing Order below.

This product may be applied by chemigation (see APPLICATION THROUGH IRRIGATION SYSTEMS section below) if allowed in the specific application sections.

TANK MIXES

Unless otherwise prohibited on this label or the label of an intended tank mix product, this product may be applied in combination with any pesticide registered for the same crop, timing, and method of application. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. **IMPORTANT: PESTICIDE TANK MIXES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. ANY LIABILITY FOR LOSS, INJURY OR DAMAGE RESULTING FROM A TANK MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL OR 24(c) LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.**

Compatibility

Before full-scale mixing of this product with other pesticides, fertilizers, secondary plant nutrients, adjuvants, surfactants or oils, you must determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the tank mix combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent, **IMPORTANT: MIXING WITH OTHER SUBSTANCES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS. ANY LIABILITY FOR LOSS, INJURY OR**

DAMAGE RESULTING FROM A MIXTURE NOT SPECIFIED ON THIS LABEL OR IN MANUFACTURER'S SUPPLEMENTAL OR 24(c) LABELING DISTRIBUTED FOR THIS PRODUCT IS SPECIFICALLY DISCLAIMED BY MANUFACTURER.

Mixing Order

When pesticide mixtures are needed, add wettable powders first, this product or other flowables second, and emulsifiable concentrates last. Ensure good agitation as each component is added and do not add an additional component until the previous is thoroughly mixed. A fertilizer/pesticide compatibility agent may be needed if a fertilizer solution is to be added to the mixture. Be sure to maintain constant agitation during both mixing and application to ensure uniformity of spray mixture. Further information on Tank Mixes is available from your local Nufarm representative.

APPLICATION THROUGH IRRIGATION SYSTEMS (CHEMIGATION)

This product may be applied at rates specified on this label either alone or in tank mixture with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:100 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours.

- **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation, and ebb and flood or hand-held or motorized calibrated irrigation equipment and only as directed in the specific directions. **DO NOT** apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- Be sure to remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system prior to application.
- A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES

If the source of water for your irrigation system is a public water supply, follow the instructions below:

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system must be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

SAFETY DEVICES FOR IRRIGATION SYSTEMS NOT CONNECTED TO A PUBLIC WATER SUPPLY

If the source of water for your irrigation system is NOT a public water supply, follow the instructions below:

- 1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of material that is compatible with pesticides and capable of being fitted with a system interlock.
- 7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

Water Volume

Chemigation applications of this product must be made as concentrated as possible. Retention of this product on target site of insect infestation is necessary for optimum activity. Chemigation of this product in water volumes exceeding 0.10 inch/Acre is not recommended.

Uniform Water Distribution and System Calibration

The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

Chemigation Monitoring

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Drift

DO NOT apply when wind speed favors drift beyond the area intended for treatment.

RESISTANCE MANAGEMENT

For resistance management, this product contains a Group 4A insecticide. Any insect/mite population may contain individuals naturally resistant to this product and other Group 4A 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 one or more of the following steps:

- Rotate the use of this product or other Group 4A insecticides within a growing season, or among growing seasons, with different insecticide 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, record keeping, 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 pest control advisors for any additional pesticide resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report non-performance or suspected resistance, contact Nufarm at 1-800-345-3330.

Other Group 4A, neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Intruder, Impulse, Leverage, Pasada, Provado, Trimax Pro and Venom. Other 4A Group, neonicotinoid products used as soil/seed treatment include: Admire Pro, Advise, Alias, Belay, Clutch, Couraze, Cruiser, Gaucho, Macho, Macho Max, Platinum, Venom and Widow. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at http://irac-online.org/.

RESTRICTIONS

DO NOT graze treated areas or use clippings from treated areas for feed or forage.

Prevent runoff or puddling of irrigation water following application.

Keep children and pets off treated area until dry.

DO NOT apply this insecticide to areas which are water logged or saturated, which will not allow penetration into the root zone of the plant.

DO NOT apply more than 0.8 pts (12.8 fl. oz.) (0.4 lb. ai) per acre per calendar year to outdoor plants/ornamentals.

Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

APPLICATION INSTRUCTIONS

NURSERY and GREENHOUSE GROWN ORNAMENTALS and VEGETABLE PLANTS

This product is for foliar and systemic insect control in and around field-grown nursery and container stock, indoor and outdoor ornamentals (including both greenhouse and interior plantscapes) and ornamentals grown in flats, on benches or in beds. Apply this product by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests. Soil applications will result in translocation of the active ingredient upward into the plant system from root uptake. To assure optimum root uptake, apply product where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution has been shown to enhance the uptake of the active ingredient. When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this translocation delay could take 60 days or longer. For this reason, soil applications must be made prior to anticipated pest infestation to achieve optimum levels of control.

Trees (including non-bearing fruit and nut), Shrubs, Evergreens, Flowers, Foliage Plants, Groundcovers, Interior Plantscapes, and Vegetable plants intended for resale only ¹		
FOLIAR APPLICATION		
Pests Fluid ounces/ 100 gallons of water		

For control of:				
Larvae of:				
Adelgids				
Aphids				
Japanese beetles (adults)				
Lacebugs				
Leaf beetles (including Elm, Viburnum)		0.75		
Leafhoppers/Sharpshooters	(22 ml)			
Leaf miners		(22 111)		
Mealybugs				
Sawfly larvae				
Whiteflies	-			
For suppression of:				
Thrips				
	Application Methods			
Mix product with the required amount of water and app	ly as desired dependent upon the	selected use pattern. When making foliar		
applications on hard-to-wet foliage such as holly, pine	, or ivy, the addition of a spreade	r/sticker is recommended. If concentrate		
or mist type spray equipment is used, apply an amour	nt of product on the treatment are	a equivalent to the amount that would be		
used in a dilute application. This insecticide has been				
fertilizers, and other commonly used insecticides. Th				
pesticide products and local cultural practices. Any t				
small scale (pint or quart jar), using the proper proper				
mixture.				
	Remarks			
Start treatments prior to establishment of high pest po		and a hasis		
Start treatments prior to establishment of high pest po	Restrictions			
¹ Only for use on vegetable plants intended for resa				
Cabbage, Chinese Cabbage, Cauliflower, Collards, Eg	gplant, Ground Cherry, Kale, Kol	nirabi, Lettuce, Mustard Greens, Pepinos,		
Peppers, Potatoes, Rape Greens, Sorghum, Sugarbee				
	ADCAST APPLICATION			
Pests Fluid ounces/1,000 FT ² Fluid ounces/Acre				
For control of:				
White grub larvae such as:				
Japanese beetle larvae,	0.00 0.00	10.0 10.0		
Chafers,	0.23 - 0.30	10.0 – 12.8		
Phyllophaga spp.,	(7.0 – 9.0 ml)	(0.625 – 0.8 pints)		
Asiatic garden beetle,				
Oriental beetle				
Application Methods				
Mix required amount of product in sufficient water to ur		reatment area DO NOT use less than 2		
gallons of water per 1,000 sq ft				
Remarks				
For control of soil inhabiting pests, irrigate thoroughly to incorporate this insecticide into the upper soil profile.				
Bark Media: Media with 30% or more bark content may confer a shorter period of protection when treated with this product.				
Restrictions				
DO NOT apply more than 0.8 pints (12.8 fluid ounces) (0.4 lb. Al) per acre per calendar year ¹ Only for use on vegetable				
plants intended for resale including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussel Sprouts, Cabbage, Chinese Cabbage,				
Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape				
Greens, Sorghum, Sugarbeets Tomatillo, and Tomato.				

Trees, Shrubs, Flowers, and Groundcover		
SOIL APPLICATION (injection & drench)		
Pests	USE RATES	
For control of: Adelgids Aphids Black vine weevil larvae Emerald ash borer ¹	TREES: per inch of trunk diameter (DBH) 0.05 – 0.20 fluid ounces (1.5 – 6.0 ml)²	

Eucalyptus longhorned borer ¹				
Flatheaded borers (including Bronze birch and Alder) ¹ Japanese beetles		SHRUBS: per foot of shrub height		
Lace bugs		0.05 – 0.10 fluid ounces (1.5 – 3.0 ml)		
	ing Elm and Viburnum)			
Leafhoppers/Sharps Leafminers	shooters			
Mealybugs				
Pine tip moth larvae				
Psyllids		FLOWERS and GROUDCOVER:		
Royal palm bugs		0.23 - 0.30 fluid ounces (7.0 - 9.0 ml) / 1000 FT ²		
Sawfly larvae Soft scales				
White grub larvae				
Whiteflies				
For suppression of:		lles the bigh sets		
Armored scales Thrips		Use the high rate		
	Application methods	for TREES and SHRUBS		
Soil injection: Mix	the required dosage in sufficient water to i	inject an equal amount of solution in each hole. Maintain a low		
pressure and use suf	ficient solution for distribution of the liquid	into the treatment zone. Keep the treated area moist for 7 to 10		
	ess than 4 holes per tree or shrub.			
	on methods for trees and large shrubs:			
GRID System:		rs, in a grid pattern, extending to the drip line of the tree.		
CIRCLE System:	Apply in holes evenly spaced in circles, (beneath the drip line of the tree extendin	(use more than one circle dependent upon the size of the tree) g in from that line.		
BASAL System:	base.	base of the tree trunk no more than 6 to 12 inches out from the		
		Illons of water per 1,000 square feet as a drench around the base		
of the tree or shrub, c zone.	directed to the root zone. Remove plastic o	or any other barrier that will stop solution from reaching the root		
Remarks				
¹ Application to trees already heavily infested with listed borers may not prevent the eventual loss of the trees due to existing pest				
damage and tree stress.				
² Use higher specified rate for larger trees (over 8" D.B.H.) or for difficult to control insects or for trees with severe infestations. Restrictions				
DO NOT apply using Soil Injection methods in Nassau or Suffolk Counties of New York.				
DO NOT apply more than 0.8 pints (0.4 lb. Al) per acre per calendar year.				
Application methods for FLOWERS and GROUNDCOVER				
Apply as a broadcast treatment and incorporate into the soil before planting or apply prior to bloom or after all flower petals have				
		lished plants, irrigate thoroughly after application. Bark Media:		
	ore bark content may conter a shorter per	iod of protection when treated with this product.		

GRASSY AREAS IN NURSERIES

Apply this product to grassy areas under and around field and container grown plants, on roadways and other grassy areas in and around nurseries to control soil inhabiting pests. Use this product for the suppression of Mole crickets and Cutworms. The active ingredient in this product has sufficient residual activity so that applications can be made prior to the egg laying activity of the target pest. Base the need for an application on historical monitoring of the site, previous records and experience, current season adult trapping, and other methods. Make applications prior to egg hatch of the target pests. Sufficient irrigation or rainfall is needed to facilitate the movement of active ingredient through the thatch.

Pests	Fluid ounces/1,000 FT ²	Fluid ounces/Acre
For control of:	,, _,, _	
Larvae of:		
Annual bluegrass weevil		
Asiatic garden beetle		
Billbugs		
Black turfgrass ataenius	0.23 - 0.30	10.0 13.8
Chafers (Northern masked,		10.0 - 12.8
Southern masked, European)	(7.0 – 9.0 ml)	(0.625 – 0.8 pints)
Green June beetle		
Japanese beetle		
May or June beetle		
Oriental beetle		
Phyllophaga spp.		
For control of:		
Mole crickets ¹	0.30	12.8
For suppression of:	(9.0 ml)	(0.8 pints)
Chinchbugs ²		
	Application Method	
		r the treatment area. The use of accurately calibrated
		. Use equipment which will produce a uniform, coarse
	tting to eliminate off target drift. Che	ck calibration periodically to ensure that equipment is
working properly.		
		e active ingredient through the thatch. DO NOT mow
turf or lawn area until after sufficient in	0	at uniformity of application will not be affected.
	Remarks	
		ion prior to egg hatch of the target pest. Consult your
	Station, or State Extension Service S	pecialists for more specific information regarding timing
of application.		
		<pre>< egg hatch period. When adults or large nymphs are</pre>
		with the application of this product. See tank mixing
section above for general instructions		
² For suppression of Chinchbugs, mal		atching of the first instar hymphs.
Manimum and in the set of	Restrictions	
		I ounces) (0.4 lb. of active ingredient)
		aturated with water. Adequate distribution of the active
		t area must be in such a condition that the rainfall or
irrigation will penetrate vertically in the		the treatment area
DO NOT allow this product to contact	plants in bloom it bees are foraging	ine treatment area.

TURFGRASS (including Sod farms)

Use this product for the control of soil inhabiting pests of turfgrass. Use this product for suppression of cutworms and chinch bugs. Use as directed on turfgrass on sites such as home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, athletic fields and sod farms. The active ingredient in this product has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. Base the need for an application on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Make applications prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Pests	Fluid ounces/1,000 FT ²	Fluid ounces/Acre
For control of:	· · · · · · · · · · · · · · · · · · ·	
Larvae of:		
Annual bluegrass weevil		
Asiatic garden beetle		
Billbugs		
Black turfgrass ataenius		
Chafers (Northern masked,	0.23 - 0.30	10.0 – 12.8
Southern masked, European)	(7.0– 9.0 ml)	(0.625 – 0.8 pints)
European crane fly		
Green June beetle		
Japanese beetle		
May or June beetle		
Oriental beetle		
Phyllophaga spp.		
For control of:		10.0
Mole crickets ¹	0.30	12.8
For suppression of:	(9.0 ml)	(0.8 pints)
Chinchbugs ²	A service a first and Mathematica	
Apply this product is sufficient water t	Application Method	
		er the treatment area. The use of accurately calibrated d. Use equipment which will produce a uniform, coarse
		eck calibration periodically to ensure that equipment is
working properly.	ng to emmate on target unit. Che	eck calibration periodically to ensure that equipment is
	hours after application to move the	active ingredient through the thatch. DO NOT mow turf
		niformity of application will not be affected.
or lawn area antir area samoloni ingait	Remarks	
For control of grubs, European crane f		veevil, make application prior to egg hatch of the target
		State Extension Service Specialists for more specific
information regarding timing of applicati		
		k egg hatch period. When adults or large nymphs are
		with the application of this product. See tank mixing
section above for general instructions		
² For suppression of Chinchbugs, make		atching of the first instar nymphs.
	Restrictions	
Maximum application rate per acre per	calendar year: 12.8 fluid oz (0.8	pints) (0.4 lb. of active ingredient)
DO NOT make application when treatm	ent area is waterlogged or soil is s	aturated with water. Adequate distribution of the active
ingredient cannot be achieved when th	ese conditions exist. The treatmer	nt area must be in such a condition that the rainfall or
irrigation will penetrate vertically in the		
DO NOT allow this product to contact p		
DO NOT graze treated areas or use cli		or forage.
DO NOT allow runoff or puddling of irrig		
Keep children and pets off treated area	until dry.	
Do not use for seed production.		

EBB & FLOOD APPLICATION

Apply this product through Ebb and Flood applications. To assure accurate uptake prior to treatment, bring a minimum of 10 plants up to a known field capacity and allow to dry out for one or two days. Re-wet these plants to determine how much water on average each plant will absorb to bring it back at field capacity. Use the volume absorbed per plant (keeping pot sizes uniform) multiplied by the number of pots being treated. Add to this volume a required minimum to flood your smallest treatment area. This will minimize the return back to the storage tank. Re-use the returned volume with subsequent irrigation or nutrients on the same plants.

	Ornamental and vegetable plants⁵ grown		grown in containers
Pests	Pot size (inches)	Herbaceous species including vegetable plants⁵ (1 or 2 plants/pot)	Woody perennials, Herbaceous species including vegetable plants⁵ (3 or more/pot)
		ml / 100 plants	
For control of: Adelgids	2	0.80	1.25
Aphids Armored scales (suppression)	3	1.25	1.85
Fungus gnats (larvae only)¹ Japanese beetles (adults) Lacebugs	4	1.65	2.50
Lacebugs Leaf Beetles (including Elm and Viburnum)	5	2.10	3.15
Leafhoppers/Sharpshooters Leafminers	6	2.50	3.85
Mealybugs Psyllids	7	2.95	4.55
Root mealybugs ² Root weevil complex:	8	3.30	5.00
(such as Apoka, Black vine, Citrus root)³ Soft scales	9	3.70	5.55
Thrips (suppression) ⁴ Whiteflies	10	4.15	6.25
White grub larvae (such as Japanese beetle,	11	4.50	7.15
Masked chafers, European chafer, Oriental beetle, Asiatic garden beetle)	12	5.00	8.35

¹ **Fungus gnat larvae** in the soil will be controlled by drench or incorporation. **No adult Fungus Gnat control.** Other foliar insect control is achieved by the uptake of this product from a healthy root system translocating the active ingredient up into the plant.

² Root Mealybug control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 1.0 fluid ounces (30 ml) in 150 gallons of water.

³ Citrus Root Weevil: For use on non-bearing citrus nursery stock.

⁴**Thrips** suppression on foliage only. Thrips in buds and flowers will not be suppressed.

⁵ Note: For use on vegetable plants intended for resale only including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape

DRENCH and IRRIGATION APPLICATIONS

Use this product for drench and irrigation application only on greenhouse and nursery grown ornamentals, vegetable plants intended for resale only, and interior plantscapes using soil drenches, mirco-irrigation, drip irrigation, overhead irrigation, ebb and flood irrigation, or hand-held or calibrated motorized irrigation equipment. This product may be applied at rates specified on the label either alone or in tank mixtures with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:100 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation is necessary if the mixture is allowed to stand more than 24 hours. Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system. Only use this product through micro irrigation (individual spaghetti tubes), drip irrigation, overhead irrigation, ebb and flood, or handheld or motorized calibrated irrigation equipment. **DO NOT** apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non uniform distribution of treated water.

	Ornamental and vegetable plants⁵ grown in containers			
Pests	Container size (inches)	Herbaceous species including vegetable plants⁵ (1 or 2 plants/pot)	Woody perennials, Herbaceous species including vegetable plants⁵ (3 or more/pot)	
		d with 1.0 fluid oz (30 ml)		
	2	3000	2000	
For control of:	3	2000	1350	
Adelgids	4	1500	1000	
Aphids	5	1200		
Fungus gnats (larvae only) ¹			800	
Japanese beetles (adults)	6	1000	650	
Lacebugs Leaf Beetles (including Elm and	7	850	550	
Viburnum leaf beetles)	8	750	500	
Leafhoppers (including glassy-	9	675	450	
winged sharpshooter)	10	600	400	
Leafminers				
Mealybugs Psyllids	11	550	350	
Root mealybugs ²	12	500 Application metho	300	
Root weevil complex: (such as Apopka, Black vine, Citrus root weevils) ³ Soft scales	dium without loss of liquid from the directions. Follow application with t 10 days in order to avoid loss of			
Thrips (suppression) ⁴ Whiteflies	active ingredient du	and vegetable plants⁵ grown	in flats, benches, or beds	
White grub larvae		0.34 fl. oz. (10 mL) per 1,000		
(such as Japanese beetle,		Application metho	•	
Masked chafers, European chafer, Oriental beetle, Asiatic garden beetle)	Mix required amount in sufficient water to uniformly cover the area being treated. D use less than 2 gallons of mixture per 1,000 square feet. Apply as a broadcast treat and incorporate into the medium before planting. Allow no leaching or runout for 10 after application.			
		Remarks		
¹ Fungus gnat larvae in the soil will b control is achieved by the uptake of				
² Root Mealybug control will require minimizing the amount of leachate.			ge is essential for control while	
³ Citrus Root Weevil: For use on no	n-bearing citrus nurser	y stock.		
⁴ Thrips suppression on foliage only.	Thrips in buds and flo	wers will not be suppressed.		
⁵ Note: For use on vegetable plants Sprouts, Cabbage, Chinese Cabba Greens, Pepinos, Peppers, Potatoes	ge, Cauliflower, Colla			

of Containers treated with 1.0 fluid oz (30 ml) 244 – 340 210 – 280 185 – 220 110 – 160
210 – 280 185 – 220
185 – 220
110 – 160
75 – 100
45 – 60
30 – 40
15 – 20
n

Remarks
¹ Fungus gnat larvae in the soil will be controlled by drench or incorporation. No adult Fungus Gnat control. Other foliar insect

² Root Mealybug control will require a thorough drenching of containerized media. Coverage is essential for control while

minimizing the amount of leachate. Rate: 1.0 fluid ounces (30 mL) in 150 gallons of water.

³ Citrus Root Weevil: For use on non-bearing citrus nursery stock.

⁴ Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.

	Field and Forest Nurseries	
Pests	Fluid ounces / 1,000 ft of row	Fluid ounces / 1,000 square ft
For control of: White grub larvae ¹ (such as Japanese beetle, Masked chafers, European chafer, Oriental beetle, Asiatic garden beetle)	1.0 (30 ml)	0.34 (10 ml) 12.8 Fluid ounces / Acre
	Application method	
Apply as a uniform band on either side dug. DO NOT allow bands in adjacent i		s wider than the actual root ball diameter to be
	Remarks	
Mowing of the vegetation in the area to of control.	be treated to a height of 3 inches or less p	rior to application will improve the consistency
Apply May through July. For target pes	control, treatment must be followed by rai	nfall or irrigation.
¹ For grub control in areas of turf, apply feet (10.9 – 12.8 fluid ounces / Acre)	as a broadcast application using 0.25 – 0.	34 fluid ounces (7 – 10 ml) per 1,000 square
	Restrictions	
DO NOT use less than 2 gallons of spra	ay volume per 1,000 square feet (85 GPA)	

DO NOT exceed 12.8 fluid ounces / acre per calendar year (0.4 lb. Al/A)

LANDSCAPE ORNAMENTALS and PLANTINGS

This product is for use on ornamentals and plantings in commercial and residential landscapes and interior plantscapes. It is a systemic product. Apply this product by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests. Soil applications will result in translocation of the active ingredient upward into the plant system from root uptake. Apply this product where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution has been shown to enhance the uptake of the active ingredient. When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this translocation delay could take 60 days or longer. For this reason, soil applications must be made prior to anticipated pest infestation to achieve optimum levels of control.

Trees, Shrubs, Evergreens, Flowers, Folia	ge Plants, Groundcovers,	Interior Plantscapes
FC	LIAR APPLICATION	
Pests	Fluid ounces	/ 100 gallons of water
For control of: Larvae of: Adelgids Aphids Japanese beetles (adults) Lacebugs Leaf beetles (including Elm, Viburnum) Leafhoppers/Sharpshooters Leaf miners Mealybugs Sawfly larvae Whiteflies For suppression of:		0.75 (22 ml)
Thrips		
placements or other ant control tactics to further reduce Mix product with the required amount of water and a foliar applications on hard-to-wet foliage such as ho concentrate or mist type spray equipment is used, use in a dilute application. This insecticide has been for fertilizers, and other commonly used insecticides. The pesticide products and local cultural practices. Any ta small scale (pint or quart jar), using the proper propo	Application Methods oply as desired dependent upon only, pine, or ivy, the addition of an equivalent amount of product und to be compatible with comr physical compatibility of this pro- ank mixture which has not been p	a spreader/sticker is recommended. If on the area sprayed, as would be used nonly used fungicides, miticides, liquid oduct may vary with different sources of previously tested must be prepared on a
mixture.		
	Remarks	
Start treatments prior to establishment of high pest po	pulations and reapply on an as ne	eded basis.
	ADCAST APPLICATION	
Pests	Fluid ounces/1,000 FT ²	Fluid ounces/Acre
For control of: White grub larvae such as: Japanese beetle larvae, Chafers, <i>Phyllophaga</i> spp., Asiatic garden beetle, Oriental beetle	0.23 – 0.30 (7.0 – 9.0 ml)	10.0 – 12.8 (0.625 – 0.8 pints)
	pplication Methods	
Mix required amount of product in sufficient water to un gallons of water per 1,000 sq ft	iformly and accurately cover the t	reatment area. DO NOT use less than 2
	Remarks	
Irrigate thoroughly to incorporate this insecticide into the		
DO NOT apply more than 0.8 pints (0.4 lb. Al) per acr DO NOT use in commercial greenhouses, nurseries, or on DO NOT apply to Landscape Ornamentals and Plantin	grasses grown for seed, or on comn	

Follow application restrictions for Non-Agricultural Use Sites found in the RESTRICTIONS section of this label to protect bees and other insect pollinators. Keep children and pets off treated area until dry.

Trees, Shrubs, Flowers, and Groundcover In Commercial and Residential Landscapes			
SOIL APPLICATION			
	Pests USE RATES		
For control of: Adelgids Aphids Black vine weevil la		TREES: per inch of trunk diameter (DBH) 0.05 – 0.20 fluid ounces (1.5 – 6.0 ml)²	
Emerald ash borer ¹ Eucalyptus longhorr		0.00 – 0.20 India Odifices (1.5 – 0.0 Init)	
Japanese beetles Lace bugs		SHRUBS: per foot of shrub height	
	ing Elm and Viburnum) shooters	0.05 – 0.10 fluid ounces (1.5 – 3.0 ml)	
Mealybugs Pine tip moth larvae Psyllids		FLOWERS and GROUDCOVER:	
Royal palm bugs Sawfly larvae Soft scales		0.23 - 0.30 fluid ounces (7.0 – 9.0 ml) / 1000 FT ²	
White grub larvae Whiteflies			
For suppression of: Armored scales Thrips	Armored scales Use the high rate Thrips		
Application methods for TREES and SHRUBS			
pressure and use suf		nject an equal amount of solution in each hole. Maintain a low into the treatment zone. Keep the treated area moist for 7 to 10	
Specific Soil Injection	on methods for trees and large shrubs:		
GRID System:	Holes must be spaced on 2.5 foot center	rs, in a grid pattern, extending to the drip line of the tree.	
CIRCLE System:	Apply in holes evenly spaced in circles, (beneath the drip line of the tree extendin	use more than one circle dependent upon the size of the tree) g in from that line.	
BASAL System: Space injection holes evenly around the base of the tree trunk no more than 6 to 12 inches out from the base.			
		llons of water per 1,000 square feet as a drench around the base or any other barrier that will stop solution from reaching the root	
	Re	marks	
¹ Application to trees pest damage and tr		may not prevent the eventual loss of the trees due to existing	
	d rate for larger trees (over 8" D.B.H.) or fo	or difficult to control insects or for trees with severe infestations.	
		rictions	
	Soil Injection methods in Nassau or Sufforthan 0.8 pints (0.4 lb. Al) per acre per cale		
	Application methods for FL	OWERS and GROUNDCOVER	
	t treatment and incorporate into the soil be g application to established plants.	fore planting or apply after plants are established. Irrigate	

Pomefruits In Commercial and Resider (oriental), Quince	ntal Landscapes: Apple, Crabapple	, Loquat, Mayhew, Pear, Pear	
	FOLIAR APPLICATION		
Pests	USE RATES		
For control of: Aphids (except Wooly apple aphid) ¹ Leafhoppers/Sharpshooters ² Leafminers ³ Mealybugs ⁴ San Jose scale ⁵	0.75 fluid ounces (22 ml) / 100 gallons of water	3.0 fluid ounces/ Acre (90 ml)	
	Application methods		
Apply the specified dosage as a foliar spray as need	eded after petal-fall is complete.		
	Remarks		
The amount of this product required per acre will on a standard of 400 gallons of dilute spray solution ¹ For control of Rosy apple aphid, apply prior to lea ² For late season (preharvest) control of Leafhopper ³ For first generation Leafminer control, make 1 st a result from the earliest possible application. For applications made early in the adult flight against severe pressure continues or if generations are control in the control of Mealybugs, ensure good spray cov Mealybugs. ⁵ For San Jose scale, time applications to the craw	n per acre for large trees. afrolling caused by the pest. species, apply this product while most Leafl pplication as soon as petal-fall is complete. 2 nd and succeeding generations of Leafmine egg and early instar larvae. A 2 nd applicati verlapping. A single application may result erage of the trunk and scaffolding limbs or ler stage. Treat each generation.	hoppers are in the nymphal stage. Greatest Leafminer control will er, optimal control is obtained from on may be required 10 days later if in suppression only. This product	
	Restrictions		
DO NOT apply more than 3.0 fluid ounces (0.09 l DO NOT make more than 4 applications. Allow 10 or more days between applications. Allow at least 7 days between last application and DO NOT use on Pomefruits grown for commercial DO NOT use in California for control on Pears. Follow application restrictions for Non-Agricult protect bees and other insect pollinators. Keep children and pets off treated area until dry	harvest. production.	NS section of this label to	

FOLIAR APPLICATION			
Pests USE RATES			
For control of: Yellow pecan aphid Black margined aphid Pecan leaf phylloxera Pecan spittlebug Pecan stem phylloxera	0.75 fluid ounces (22 ml) / 100 gallons of water	3.0 fluid ounces/ Acre (90 ml)	
	Application methods		
may be required to achieve control. Scout control. Addition of an organosilicone-base use rate may improve coverage.	build before populations become extreme. Two applic and retreat if needed. Thorough uniform coverage of ad spray adjuvant at a rate not to exceed the adjuvant Remarks are will depend on tree size and volume of foliage pres	foliage is necessary for optimal manufacturer's recommended	
on a standard of 400 gallons of dilute spra		I I	
	Restrictions		
	er calendar year. ns. rcial production. ss directed by state approved 24(c) labeling. Agricultural Use Sites found in the RESTRICTION s.	S section of this label to	

Allow at least **7** days between last application and harvest.

FOLIAR APPLICATION			
Pests	USE RATES 0.75 fluid ounces (22 ml) / 100 gallons of water 1.5 fluid ounces/ (45 ml)		
For control of: Leafhoppers/Sharpshooters Mealybugs			
	Application methods		
Apply specified dosage of this product as	a foliar spray using 200 gallons of water per acre.		
	Restrictions		
Allow 14 or more days between application Application can be made up to and include	ling the day of harvest. I-Agricultural Use Sites found in the RESTRICTION	IS section of this label to	

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. **DO NOT** walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

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

CONTAINER DISPOSAL [HANDLING]:

[Nonrefillable Containers 5 Gallons or Less]

Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse container (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 1/4 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

[Nonrefillable containers larger than 5 gallons]

Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

[Refillable containers larger 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 a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[Refillable containers for return to Nufarm]

Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Close all openings and replace all caps. Contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULARTRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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