

228-528

(12/10/2012 (

1/57



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D C 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

DEC 10 2012

Matthew Granahan
Nufarm Americas Inc
150 Harvester Drive Suite 200
Burr Ridge IL 60527

Subject Amendment to correct conversion chart for linear application
EPA Registration No 228 528
Primary Brand Name Nuprid 4F Insecticide
Decision No 472454
Submission Date November 21, 2012

Dear Mr Granahan

The label referred to above submitted under FIFRA as amended is **acceptable** Please submit one final printed copy for the above mentioned label before releasing the product for shipment If you have any questions please contact Gene Benbow at (703) 347 0235 or via email at benbow_gene@epa.gov

Sincerely

A handwritten signature in black ink, which appears to read "Venus Eagle", is written over a horizontal line.

Venus Eagle
Product Manager 01
Insecticide Rodenticide Branch
Registration Division (7505P)

MASTER LABEL/COVER PAGE

Note This Master label contains 2 Sub-labels which bear directions for use in Commercial Agriculture and in Nursery Greenhouse and Landscape Ornamentals

NUPRID[®] 4F

INSECTICIDE

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

59 6%

TOTAL

100 0%

EPA REG NO 228 528

EPA EST NO _____

MANUFACTURED FOR
NUFARM AMERICAS INC
150 HARVESTER DRIVE
BURR RIDGE IL 60527
800-455 2000



000228 00528 20121207 EPA Amendment

ACCEPTED

DEC 10 2012

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

3/57

SUB LABEL A COMMERCIAL AGRICULTURE

GROUP **4A** INSECTICIDE

NUPRID[®] 4F

INSECTICIDE

[alternate brand names]

NUPRID[®] 4F MAX 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

59.6%

TOTAL

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
150 HARVESTER DRIVE
BURR RIDGE IL 60527
800-455 2000



NET CONTENTS _____ GALS (_____ Liters)

SUB LABEL A COMMERCIAL AGRICULTURE

**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 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 waterproof material such as barrier laminate butyl rubber nitrile rubber neoprene rubber natural rubber polyethylene polyvinylchloride (PVC) or viton

FIRST AID	
IF INHALED	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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	

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear

Long sleeved shirt and long pants

Chemical resistant gloves made of any waterproof material such as barrier laminate butyl rubber nitrile rubber neoprene rubber natural rubber polyethylene polyvinylchloride (PVC) or viton

- 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 or weeds **DO NOT** apply this product or allow it to drift to blooming crops or weeds if bees are visiting 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

SUB LABEL A COMMERCIAL AGRICULTURE

5/57

DIRECTIONS FOR USE

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

DO NOT apply this product in a way that will contact workers or other persons either directly or through drift Only protected handlers may be in the area during application For any requirements specific to your State or Tribe consult the agency responsible for pesticide regulation

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170 This Standard contains requirements for the protection of agricultural workers on farms forests nurseries and greenhouses and handlers of agricultural pesticides It contains requirements for training decontamination notification and emergency assistance It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard

DO NOT enter or allow worker entry into treated areas during 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 any waterproof material such as barrier laminate butyl rubber nitrile rubber neoprene rubber natural rubber polyethylene polyvinylchloride (PVC) or viton

Shoes plus socks

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 As with any insecticide care must be taken to minimize exposure of this product to honey bees and other pollinators Use of this product on crops requiring bee pollination must be avoided during bloom and a minimum of 10 days prior to bloom 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

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 your use area

This product contains a Group 4A insecticide called imidacloprid Insect biotypes with acquired or inherent tolerance to group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control of targeted species This may eventually result in partial or total loss of control of those species by this product and other Group 4A products

The active ingredient in this product is a member of neonicotinoid chemical group Avoid using a block of more than three consecutive applications of this product and/or other Group 4A products having the same or similar mode of action

Following a neonicotinoid block of treatments Nufarm strongly encourages the rotation to a block of applications with effective products of a different mode of action before using additional applications of neonicotinoid products Use of a block rotation or windowed approach along with other IPM practices is considered an effective use strategy for preventing or delaying an insect's pest's ability to develop resistance to this class of chemistry

Foliar applications of this product or other Group 4A products from the neonicotinoid chemical class must not be used on crops previously treated with a long residual soil applied product from the neonicotinoid chemical class

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 Contact your local extension specialist certified crop advisor and/or product manufacturer for additional insect resistance management recommendations Also for more information on Insect Resistance Management (IRM) visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org/>

SUB LABEL A COMMERCIAL AGRICULTURE

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

SUB LABEL A COMMERCIAL AGRICULTURE

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 overhead chemigation (see **CHEMIGATION APPLICATION** section below) if allowed in crop specific recommended 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 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 Observe the most restrictive label statements of various tank mix products used **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**

SUB LABEL A COMMERCIAL AGRICULTURE

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

Chemigation applications of this product may be made to crops through overhead sprinkler chemigation systems if specified in crop specific recommendation sections **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 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 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

SUB LABEL A COMMERCIAL AGRICULTURE

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 pipeline must 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. 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.

SUB LABEL A COMMERCIAL AGRICULTURE

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 Plant bugs Thrips Whiteflies	0.65	8.5 – 10.6 (Depending on row spacing)
Application Methods		
Apply specified dosage by one of the following methods 1 In furrow or narrow band spray. When applying as an in furrow spray, direct 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 3 Chemigation into root zone through low pressure drip or trickle irrigation equipment.		
Restrictions		
Maximum amount of product allowed per crop season 10.6 fluid ounces/Acre (0.33 lb AI/Acre) Maximum number of active ingredient applications per crop season 6 DO NOT apply more than 0.5 lbs. of active ingredient per acre per season 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>) Green stink bug Southern green stink bug Bollworm/Budworm (ovicidal effect)	1.0 – 2.0	
For suppression of Lygus bugs (<i>Lygus hesperus</i>) Whiteflies (other than banded winged whitefly)	2.0	
Application Methods		
Apply through properly calibrated ground, aerial, or chemigation application equipment.		
Restrictions		
Pre Harvest Interval (PHI) 14 days Minimum interval between applications 7 days Maximum amount allowed per season 10.0 fluid ounces/Acre (0.31 lb AI/A) DO NOT apply more than 0.5 lbs. of active ingredient per acre per season 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.		
TANK MIX APPLICATIONS		
Pests (in addition to those listed above)	NUPRID 4F Rate Fluid ounces/Acre	BIDRIN 8 Rate ¹ Fluid ounces/Acre
For early season control of Thrips	1.0 – 1.5	1.6 – 3.2
For mid to late season control of Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator		4.0 – 8.0
Remarks		
This product can be tank mixed with other pesticides and/or fertilizer solutions. When tank mixing this product with other pesticides, prepare the tank mixture as specified above in the Mix Preparation instructions section. Follow the following general mixing order: 1 Add wettable powders first 2 Add this product or other flowables second 3 Add emulsifiable concentrates last		

11/57

SUB LABEL A COMMERCIAL AGRICULTURE

Be sure to maintain agitation as each component is added and do not add an additional component until the previous component is thoroughly integrated into the mixture. If a fertilizer solution is added, a fertilizer pesticide compatibility agent may be needed.

Restrictions (in addition to those listed above for NUPRID 4F foliar applications)

¹ Refer to the BIDRIN 8 product label for specific use instructions, observe all use restrictions and precautions that appear on the BIDRIN 8 label.

POTATO

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 Wireworms (with in furrow spray at planting) For suppression of disease symptoms of Potato leaf roll virus (PLRV) Potato yellows Net necrosis (PLRV)	0.45 – 0.65	6.5 – 10.0
Application Methods		
Apply specified dosage in one of the following methods 1 In furrow spray during planting directed on seed pieces or seed potatoes OR 2 Subsurface side dress on both sides of the row covered with 3 or more inches of soil OR 3 Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil OR 4 Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting For effective pest control or suppression applications of this product must be placed below soil surface and in contact with seed piece or within root zone For potatoes grown on highly permeable soils with shallow water table at plant applications of this product may be made in a 2 to 4 inch band (width of planter shoe opening) and completely covered		
Restrictions		
Maximum amount of product allowed per crop season 10.0 fluid ounces/Acre (0.31 lb AI/Acre)		
FOLIAR APPLICATIONS		
Pests	Fluid ounces/Acre	
For control of Aphids Colorado Potato beetle Flea beetles Fleahoppers Psyllids	1.5	
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) 7 days Minimum interval between applications 7 days Maximum amount allowed per season 6.4 fluid ounces/Acre (0.20 lb AI/A)		
SEED PIECE APPLICATIONS¹		
Pests	Fluid ounces/100 lbs seed	Fluid ounces/Acre
For control of Aphids Colorado potato beetle Flea beetles Leafhoppers Potato psyllid Wireworms (seed piece protection)	0.2 – 0.4	4.0 – 8.0
For suppression of disease symptoms of Potato leaf roll virus (PLRV) Potato yellows Net necrosis (PLRV)	0.4	8.0
Application Methods		

SUB-LABEL A COMMERCIAL AGRICULTURE

Apply specified dosage as a diluted spray onto seed pieces using a shielded spray system. Dilute with 3 parts water or less to 1 part this product. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after this product's application. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Plant seed pieces as soon as possible after treating avoiding prolonged exposure 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 lbs/Acre

Restrictions

Maximum amount of product allowed per crop season **10.0 fluid ounces/Acre** (0.31 lb AI/Acre)

DO NOT use treated seed pieces for food, feed, or fodder.

DO NOT apply any subsequent applications of this product (in furrow) Gauch[®], Leverage[®], or Provado[®] following a seed piece treatment of this product.

Apply only in areas that are equipped to remove spray mist or dust or with adequate ventilation.

SOYBEAN

FOLIAR APPLICATIONS¹

Pests	Fluid ounces/Acre
For control of Aphids Bean leaf beetle Cucumber beetles / Rootworm adults Japanese beetle (adults) Leafhoppers Whiteflies	1.5

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) **7 days**

Minimum interval between applications **7 days**

Maximum amount allowed per crop season **3.65 fluid ounces/Acre** (0.13 lb AI/A)

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

TOBACCO

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 Aphids Flea beetles	0.5	0.7
For control of Mole crickets Whiteflies Wireworms	0.7 – 1.4	0.9 – 1.4
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 the following methods:

1. 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 dislodging treated potting media from roots. OR
2. In furrow spray or transplant water drench during setting. OR
3. Chemigation into root zone through low pressure drip, trickle, micro sprinkler, or equivalent equipment.

Remarks

Important Note: Proper tray drench applications of this product have been shown to be the most efficacious method of application. However, the specified rate of this product may be applied as a combination of the tray drench in the planthouse and/or transplant water drench in field. Adverse growing conditions may cause a delay in uptake of this product into the plant and a delay in control.

Restrictions

SUB LABEL A COMMERCIAL AGRICULTURE

Pre Harvest Interval (PHI) 14 days Maximum amount of product allowed per crop season 16 0 fluid ounces/Acre (0 50 lb AI/Acre)	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids	0 8 – 1 6
For control of Flea beetles Japanese beetles	1 6
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 7 days Maximum amount allowed per crop season 9 0 fluid ounces/Acre (0 28 lb AI/A)	

PEANUT	
SOIL APPLICATIONS¹	
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 crop season 12 0 fluid ounces/Acre (0 38 lb AI/A) ¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling	
FOLIAR APPLICATIONS¹	
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 days Maximum amount allowed per crop season 4 2 fluid ounces/Acre (0 13 lb AI/A) ¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling	

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) *Momordica* spp (includes balsam apple balsam pear bitter melon Chinese cucumber) Muskmelon (hybrids and/or cultivars of *Cucumis melo* 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 *Citrullus lanatus*)

SOIL APPLICATIONS (FIELD)

Pests	Fluid ounces/Acre
For control of Aphids Cucumber beetles Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	8.0 – 12.0
For suppression of disease symptoms of Bacterial wilt (as vectored by various cucumber beetles) Leaf silvering resulting from whitefly feeding	12.0

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) **21 days**

Maximum amount of product allowed per application **12.0 fluid ounces/Acre** (0.38 lb AI/Acre)

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

GREENHOUSE APPLICATIONS¹

Pests	Fluid ounces/1000 plants
For control of Aphids Whiteflies	0.05

Application 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
- 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 **1**

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

SUB LABEL A COMMERCIAL AGRICULTURE

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 Aphids Colorado potato beetles Flea beetles Leafhoppers Thrips (foliage feeding only) Whiteflies	Okra & Pepper 8.0 – 16.0
For suppression of disease symptoms of Tomato mottle virus Tomato spotted wilt virus Tomato yellow leaf curl virus	Other Listed Crops 8.0 – 12.0
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) 21 days Maximum amount of product allowed on Okra and Pepper per application 16.0 fluid ounces/Acre (0.5 lb AI/Acre) Maximum amount of product allowed on other listed fruiting vegetable crops per application 12.0 fluid ounces/Acre (0.38 lb AI/Acre) DO NOT use on crops grown for seed unless allowed by state approved 24(c) labeling	
FOLIAR APPLICATIONS (FIELD)	
Pests	Fluid ounces/1000 plants
For control of Aphids Colorado potato beetle Leaf beetles Whiteflies ¹	1.5 – 2.5
For control of Pepper weevil (Pepper only) ²	2.5
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	
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 rate must be used when targeting adult whiteflies ² For pepper weevil apply specified dosage of this product by 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 APPLICATIONS¹	
Pests	Fluid ounces/1000 plants
For control of Aphids Whiteflies	0.05
Application Methods	
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	

SUB LABEL A COMMERCIAL AGRICULTURE

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 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

GREENHOUSE VEGETABLES Mature Cucumber and Tomato plants in production greenhouses ONLY	
Pests	Fluid ounces/1000 plants
For control of Aphids Whiteflies	0 7
Application Methods	
Apply specified dosage in a minimum of 16 gallons of water 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	
Remarks	
Make application when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds Repellency of bumble bee pollinators and negative effects on some beneficials (<i>Opius</i> 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	
Restrictions	
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 AI)/1 000 plants	
DO NOT use on crops grown for seed unless allowed by state approved 24(c) labeling	

GLOBE ARTICHOKE	
SOIL APPLICATION¹	
Pests	Fluid ounces/1000 plants
For control of Aphids Leafhoppers	8 0 – 16 0
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	
Restrictions	
Pre Harvest Interval (PHI) 7 days	
Maximum amount of product allowed per crop season 16 0 fluid ounce/Acre (0 50 lb AI/A)	
¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling	
FOLIAR APPLICATION	
Pests	Fluid ounces/1000 plants
For control of Aphids Leafhoppers	1 6 – 4 0
Application Methods	
Apply this product as a broadcast or directed spray method through properly calibrated ground aerial or chemigation application	

SUB LABEL A COMMERCIAL AGRICULTURE

equipment Thorough coverage of foliage is necessary
Restrictions
Pre Harvest Interval (PHI) 7 days
Minimum Interval between applications 14 days
Maximum amount of product allowed per crop season 16 0 fluid ounce/Acre (0 50 lb AI/A)

HERBS Angelica Balm (lemon balm) Basil (fresh and dried) Borage Bumet Camomile Catnip Chervil (dried) Chinese chive Chive Clary Corander (cilantro or Chinese parsley leaves) Costmary Culantro (leaf) Curry (leaf) Dillweed Horehound Hyssop Lavender Lemongrass Lovage (leaf) Marigold Marjoram Nasturtium Parsley (dried) Pennyroyal Rosemary Rue Sage Savory (summer and winter) Sweet bay (bay leaf) Tansy Tarragon Thyme Wintergreen Woodruff Wormwood	
SOIL APPLICATIONS¹ (FIELD)	
Pests	Fluid ounces/Acre
For control of Aphids Flea beetles Leafhoppers Whiteflies	8 0 – 12 0
For suppression of Thrips (foliage feeding only)	
Application Methods	
Apply specified dosage in one of the following methods 1 In furrow spray during planting directed on or below seed OR 2 In furrow spray or transplant water drench during setting or transplanting OR 3 Shanked into or below eventual seed line OR 4 Chemigation into root zone through low pressure drip trickle micro sprinkler or equivalent equipment	
Remarks	
Not all crops and/or varieties listed above have been tested for phytotoxic effects Without specific knowledge about a particular crop and variety treat only small areas or numbers of plants and evaluate prior to full scale use	
Restrictions	
Pre Harvest Interval (PHI) 14 days Maximum amount of product allowed per season 12 0 fluid ounces/Acre (0 38 lb AI/Acre) ¹ This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling	
FOLIAR APPLICATIONS (FIELD)	
Pests	Fluid ounces/Acre
For control of Aphids Leaf beetles 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	
Remarks	
The addition of an organosilicone based spray adjuvant at a rate not to exceed the adjuvant manufacturer s specified use rate may improve coverage and control Not all crops and/or varieties listed above have been tested for phytotoxic effects Without specific knowledge about a particular crop and variety treat only small areas or numbers of plants and evaluate prior to full scale use	
Restrictions	
Pre Harvest Interval (PHI) 7 days Minimum interval between applications 5 days Maximum amount of product allowed per season 4 2 fluid ounce (0 13 lb AI/A)	

SUB LABEL A COMMERCIAL AGRICULTURE

HEAD and STEM BRASSICA VEGETABLES¹ Broccoli Broccoli raab (<i>rapini</i>) Brussels sprouts Cabbage Cauliflower Cavalo broccoli Chinese (<i>gai lan</i>) broccoli Chinese (<i>bok choy</i>) cabbage Chinese (<i>napa</i>) cabbage Chinese mustard (<i>gai choy</i>) cabbage Collards Kale Kohlrabi Mizuna Mustard greens Mustard spinach Rape greens plus Turnip tops (leaves)	
LEAFY VEGETABLES¹ Amaranth (leafy amaranth Chinese spinach tampala) Arugula (Roquette) Chervil Chrysanthemum (edible leaved and garland) Corn salad Cress (garden) Cress (upland yellow rocket winter cress) Dandelion Dock (sorrel) Endive (escarole) Lettuce (head and leaf) Orach Parsley Purslane (garden and winter) Raddicchio (red chicory) Spinach (including New Zealand and vine (Malabar spinach Indian spinach)) Watercress² (including upland)	
SOIL APPLICATIONS (FIELD)	
Pests	Fluid ounces/Acre (on 36 in rows)
For control of Aphids Leafhoppers Thrips (foliage feeding only) Whiteflies	5 0 – 12 0
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) 21 days Maximum amount of product allowed per season 12 0 fluid ounces/Acre (0 38 lb AI/Acre) ¹ DO NOT use on crops grown for seed unless permitted by state approved 24(c) labeling 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 canopies only DO NOT apply to native cress growing in streams or other bodies of water	
FOLIAR APPLICATIONS (FIELD)	
Pests	Fluid ounces/Acre
For control of Aphids Flea beetles Leafhoppers Whiteflies	1 5
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) 7 days Minimum interval between applications 5 days Maximum amount of product allowed per season 7 7 fluid ounces/Acre (0 24 lb AI/A) ¹ DO NOT use on crops grown for seed unless permitted by state approved 24(c) labeling 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 canopies only DO NOT apply to native cress growing in streams or other bodies of water	

LEAFY PETIOLE VEGETABLES Cardoon Celery Celtuce Chinese celery (fresh leaves and stalk only) Florence fennel (including sweet anise sweet fennel finocchio) Rhubarb Swiss chard	
SOIL APPLICATIONS (FIELD)	
Pests	Fluid ounces/Acre (on 36 in rows)
For control of Aphids Leafhoppers Thrips (foliage feeding only) Whiteflies	5 0 – 12 0
Application Methods	
Apply specified dosage of this product in one of the following methods	

19/57

SUB LABEL A COMMERCIAL AGRICULTURE

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 season 12.0 fluid ounces/Acre (0.38 lb AI/Acre)	
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 <i>Lupinus</i> spp (grain lupin sweet lupin white lupin and white sweet lupin)	
Bean <i>Phaseolus</i> spp (field bean kidney bean lima bean navy bean pinto bean runner bean snap bean tepary bean wax bean) Bean <i>Vigna</i> 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 <i>Pisum</i> 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 Soybean (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)	
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 at planting directed on or below seed OR	
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	
4 In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting OR	
5 As a post seeding drench transplant water drench or hill drench	
Restrictions	
Pre Harvest Interval (PHI) 21 days	
Maximum amount of product allowed per season 12.0 fluid ounces/Acre (0.38 lb AI/Acre)	
DO NOT use on crops grown for seed unless permitted by state approved 24(c) labeling	
FOLIAR APPLICATIONS (FIELD)	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers Whiteflies	1.4
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) 7 days	
Minimum interval between applications 7 days	
Maximum amount of product allowed per season 4.2 fluid ounce (0.13 lb AI/A)	
DO NOT use on crops grown for seed unless permitted by state approved 24(c) labeling	

20/57

SUB LABEL A COMMERCIAL AGRICULTURE

ROOT VEGETABLES 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[†]

TUBEROUS and CORM VEGETABLES (except Potato) Arracacha Arrowroot Artichoke (Chinese and Jerusalem) Canna (edible Queensland arrowroot) Cassava (bitter and sweet)[†] Chayote (root) Chufa Dasheen (taro)[†]
 Ginger Leren Sweetpotato Tanier (cocoyam)[†] Turmeric Yam bean (jicama manioc pea) Yam (true)[†]

SOIL APPLICATIONS[†] (FIELD)

Pests	Fluid ounces/1 000 row ft	Fluid ounces/Acre
For control of Aphids Flea beetles Leafhoppers Thrips (foliage feeding) Whiteflies	0.35 – 0.85	5.0 – 12.0

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 (rate specified per 1 000 row feet) or shanked in 1 to 2 inches below seed depth during planting OR
- 3 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 OR
- 4 Side dress not more than 0.6 fluid ounces/1000 row feet no later than 45 days after planting

Remarks

Important Note The rate applied affects the length of control Use higher rates 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

Restrictions

Pre Harvest Interval (PHI) for Root Vegetables **21 days**

Pre Harvest Interval (PHI) for Tuberous and Corm Vegetables **3 days** (leaves) **125 days** (corms)

Maximum amount of product allowed per crop season **12.0 fluid ounces/Acre** (0.38 lb AI/Acre)

Maximum applications per crop season **1**

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

[†] Soil application to Root Vegetables is not permitted in California unless otherwise directed by state approved 24(c) labeling

FOLIAR APPLICATIONS[†] (FIELD)

Pests	Fluid ounces/Acre
For control of Aphids Flea beetles Leafhoppers Whiteflies	1.4

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

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

Restrictions

Pre Harvest Interval (PHI) **7 days**

Minimum interval between applications **5 days**

Maximum amount of product allowed per crop season

Radish **1.4 fluid ounce** (0.044 lb AI/A)

All other listed crops **4.2 fluid ounces/Acre** (0.13 lb AI/A)

Maximum applications per crop season

Radish **1**

All other listed crops **3**

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

[†] This use is not permitted in CA unless otherwise directed by state approved 24(c) labeling

SUB LABEL A COMMERCIAL AGRICULTURE

SUGARBEET (California only)	
SOIL APPLICATIONS (FIELD)	
Pests	Fluid ounces/Acre
For control of Aphids Flea beetles Leafhoppers Whiteflies	3 0 – 6 0
For suppression of disease symptoms of Western yellows virus Beet curly top hybrigeminivirus (BCTV)	
Application Methods	
Apply specified dosage of this product in the following method Apply specified dosage in sufficient carrier volume to insure uniform application Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting	
Remarks	
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 crop season 6 0 fluid ounces/Acre (0 19 lb AI/Acre) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging DO NOT use on crops grown for seed unless permitted by state approved 24(c) labeling	

SUB LABEL A COMMERCIAL AGRICULTURE

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 X 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)

SUB LABEL A COMMERCIAL AGRICULTURE

BERRY, BUSH and VINE CROPS

STRAWBERRY annual and perennial varieties	
SOIL APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Whiteflies	12 0 – 16 0
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 after plants are established or on perennial crops in early spring prior to bud opening OR 2 As a plant material or plant hole treatment just prior to or during transplanting OR 3 As a band spray over the row in a minimum of 20 gallons of water per acre followed immediately by overhead irrigation to incorporate product into root zone DO NOT use plastic or other mulch that limits movement of this product into root zone	
Remarks	
The rate applied affects the length of control Use higher rates where infestations may occur later in crop development or where pest pressure is continuous	
Restrictions	
Pre Harvest Interval (PHI) 14 days Maximum amount allowed per crop season 16 0 fluid ounces/Acre (0 50 lb AI/Acre) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively 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	
SOIL APPLICATIONS (post harvest use on perennial varieties)	
Pests	Fluid ounces/Acre
For control of White grub complex (grubs of Asiatic garden beetle European and Masked chafer Japanese beetle Oriental beetle)	8 0 – 12 0
Application Methods	
Apply a single application post harvest to coincide with renovation of strawberry fields and during active egg laying period of beetles Apply specified dosage of this product in one of the following methods 1 As a ground spray via boom or backpack sprayer in a minimum of 20 gallons of water per acre OR 2 As a row band spray using an adjusted amount of product based on the treated row band area in proportion to the amount required per full acre The bandwidth must be equivalent to the width of the anticipated fruiting bed OR 3 As a chemigation application with 600 to 1 000 gallons of water followed by 0 10 to 0 25 inch irrigation	
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 season 12 0 fluid ounces/Acre (0 38 lb AI/A)	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Spittlebugs Whiteflies	1 5
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	
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 AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively 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	

SUB LABEL A COMMERCIAL AGRICULTURE

BUSHBERRY Blueberry Currant Elderberry Gooseberry Huckleberry Juneberry Ligonberry Salal	
SOIL APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Japanese beetle (adults feeding on foliage) White grub complex (grubs of Asiatic garden beetle European and Masked chafer Japanese beetle and Oriental beetle)	8 0 – 16 0
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	
Restrictions	
Pre Harvest Interval (PHI) 7 days Maximum amount of product allowed per crop season 16 0 fluid ounces/Acre (0 50 lb AI/Acre) DO NOT apply pre bloom or during bloom or when bees are actively foraging	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers/Sharpshooters	1 2 – 1 6
For control of Japanese beetles (adults) Thrips (foliage feeding)	2 4 – 3 2
For control of Blueberry maggot	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) 3 days Minimum interval between applications 7 days Maximum amount of product allowed per season 16 0 fluid ounces/Acre (0 5 lb AI/A) Maximum number of product applications per crop season 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 actively foraging	

CANEBERRY Blackberry (<i>Rubus eubatus</i> 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 <i>Rubus occidentalis</i> <i>Rubus strigosus</i> <i>Rubus idaeus</i>)	
SOIL APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers Whiteflies	8 0 – 16 0
For control of Rednecked cane borer	12 0 – 16 0

SUB LABEL A COMMERCIAL AGRICULTURE

For suppression of Thrips (foliage feeding only)		16 0
Application Methods		
Apply specified dosage in one of the following methods		
1 Chemigation into root zone through low pressure drip trickle micro sprinkler or equivalent equipment OR		
2 Basal soil drench in a minimum of 500 gallons solution per acre		
Restrictions		
Pre Harvest Interval (PHI) 7 days		
Maximum amount of product allowed per season 16 0 fluid ounces/Acre (0 5 lb AI/Acre)		
DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging		
FOLIAR APPLICATIONS ¹		
Pests	Fluid ounces/Acre	
For control of Aphids Leafhoppers	3 2	
For suppression of Thrips (foliage-feeding only)		
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) 3 days		
Minimum interval between applications 7 days		
Maximum amount of product allowed per season 16 0 fluid ounces/Acre (0 5 lb AI/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 approved 24(c) labeling		

CRANBERRY	
SOIL APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Rootgrubs (Scarab) Rootworms (Chrysomelid)	8 0 – 16 0
Application Methods	
Apply this product to moist soil Apply specified dosage of this product in one of the following methods	
1 As a soil spray (ground application) directed to the root and crown area using a minimum of 20 gal of water per acre OR	
2 As a chemigation application with 600 to 1 000 gallons water	
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 season 16 0 fluid ounces/Acre (0 5 lb AI/Acre)	
DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging	

26/57

SUB LABEL A COMMERCIAL AGRICULTURE

GRAPES American bunch grape Muscadine grape and Vinifera grape	
SOIL APPLICATIONS	
Pests	Fluid ounces/Acre
For control of European fruit lecanium Leafhoppers/Sharpshooters Mealybugs <i>Phylloxera</i> spp ¹	8 0 – 16 0
For suppression of Grapeleaf skeletonizer Nematodes ²	16 0
For suppression of disease symptoms of Pierce s disease	
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 Subsurface side dress shanked into the root zone on both sides of the plants followed by irrigation OR	
3 Hill drench in sufficient water to insure incorporation 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 <i>Phylloxera</i> infestations over time or prevents <i>Phylloxera</i> from becoming established	
² For 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 trickle 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 season 16 0 fluid ounces/Acre (0 5 lb AI/Acre)	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Leafhoppers/Sharpshooters Mealybugs	1 2 – 1 6
For control of Grapeleaf skeletonizer	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 crop season 3 2 fluid ounces/Acre (0 1 lb AI/A)	

HOPS	
SOIL APPLICATIONS¹	
Pests	Fluid ounces/Acre
For control of Aphids	9 6
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 Subsurface side dress shanked into the root zone on both sides of the plants followed by irrigation OR	
3 Hill drench in sufficient water to insure incorporation into the root zone followed by irrigation	

SUB LABEL A COMMERCIAL AGRICULTURE

Restrictions	
Pre Harvest Interval (PHI) 60 days Maximum amount of product allowed per crop season 9.6 fluid ounces/Acre (0.3 lb AI/Acre) ¹ This use is not permitted in CA unless otherwise specified by state approved 24(c) labeling	
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 season 9.6 fluid ounces/Acre (0.3 lb AI/A)	

COFFEE	
SOIL APPLICATIONS ¹	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers Leafminers	8.0 – 16.0
For suppression of Scales	
Application Methods	
Apply specified dosage in one of the following methods 1 Chemigation into root zone through low pressure drip, trickle, micro sprinkler or equivalent equipment OR 2 Subsurface side dress shanked into the root zone on both sides of the plants followed by irrigation OR 3 Basal soil drench in sufficient water to insure incorporation into the root zone followed by irrigation	
Restrictions	
Pre Harvest Interval (PHI) 7 days Maximum amount of product allowed per crop season 16.0 fluid ounces/Acre (0.5 lb AI/Acre) 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 California unless otherwise directed by state approved 24(c) labeling	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers Whiteflies	3.2
For suppression of Scales	
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) 7 days Minimum interval between applications 7 days Maximum amount of product allowed per crop season 16.0 fluid ounces/Acre (0.5 lb AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging	

SUB LABEL A COMMERCIAL AGRICULTURE

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 White sapote (<i>Casimiroa</i> spp) and other cultivars and/or hybrids of these	
SOIL APPLICATIONS	
Pests	mL/ft³ of container
For control of Aphids Asian citrus psyllid Black fly Citrus leafminer Leafhoppers/Sharpshooters Mealybugs Scales Whiteflies	0.38
For control of Citrus root weevil (larval complex) ¹	0.63 – 1.25
For suppression of Citrus thrips (foliage feeding only)	1.25
Application Methods	
Determine volume of container and calculate dosage necessary to treat container. Apply calculated dosage of this product per container as a soil drench or through low pressure drip or trickle irrigation water. Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results treatment must be made at planting prior to insect infestation. Retreat if necessary.	
Remarks	
¹ For control of larvae of the citrus root weevil complex, make application prior to neonate larvae entering potting media. Utilize 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 White sapote (<i>Casimiroa</i> spp) 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 Leafhoppers/Sharpshooters Mealybugs Scales Termites (FL only) Whiteflies	8.0 – 16.0
For suppression of Citrus nematode Thrips (foliage feeding thrips only)	16
For suppression of disease symptoms of Citrus tristeza virus (CTV) through vector control Citrus yellows	
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. Apply to newly planted trees or those previously trained to drip, trickle or micro sprinkler irrigation. Soil must be lightly pre-wetted to break soil surface tension prior to applications of this product. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move this product into root zone. Allow 24 hours before initiating subsequent irrigations. OR 2 Soil surface band spray on both sides of the tree. Bands must overlap at the tree base to create a continuous band within the drip line area of the tree to be followed immediately with light 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 system of the tree. Only for trees up to 8 feet tall. OR	

29/57

SUB LABEL A COMMERCIAL AGRICULTURE

<p>4 For control of existing termite infestations apply specified dosage 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</p> <p>5 For suppression of citrus nematode apply specific dosage through low pressure chemigation or soil surface spray only ensuring complete coverage of the root system and utilizing application directions stated above for the respective application method 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</p>		
Restrictions		
<p>Pre Harvest Interval (PHI) 0 days</p> <p>Maximum amount of product allowed per crop season 16 0 fluid ounces/Acre (0 5 lb AI/A)</p> <p>DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging</p>		
FOLIAR APPLICATIONS		
Pests	Fluid ounces/100 gallons	Fluid ounces/Acre
For control of Aphids Asian citrus psyllid Black fly Leafhoppers/Sharpshooters Leafminers Mealybugs Scales ¹ Whiteflies	1 4 – 2 0 (dilute application)	4 0 – 8 0 (dependent on tree size target pest and infestation pressure)
For suppression of Thrips (foliage feeding thrips only)	2 0	8 0
Application Methods		
<p>Apply specific dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage Apply through properly calibrated ground or aerial equipment</p>		
Remarks		
<p>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</p> <p>¹Scales time applications to the crawler stage Treat each generation</p>		
Restrictions		
<p>Pre Harvest Interval (PHI) 0 days</p> <p>Minimum interval between sprays 10 days</p> <p>Maximum amount of product allowed per crop season 16 0 fluid ounces/Acre (0 5 lb AI/A)</p> <p>DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging</p>		

POME FRUIT Apple Crabapple Loquat Mayhaw Pear (including Oriental pear) Quince		
SOIL APPLICATIONS		
Pests	Fluid ounces/Acre	
For control of Aphids (including Wooly apple aphid) Leafhoppers	8 0 – 12 0	
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) 21 days Maximum amount of product allowed per crop season 12 0 fluid ounces/Acre (0 38 lb AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging		
FOLIAR APPLICATIONS		
Pests	Fluid ounces/100 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

39/57

SUB LABEL A COMMERCIAL AGRICULTURE

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	
Restrictions	
Pre Harvest Interval (PHI) 7 days Minimum interval between sprays 10 days Maximum amount of product allowed per crop season 16 0 fluid ounces/Acre (0 5 lb AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging	

POMEGRANATE

SOIL APPLICATIONS ¹	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers/Sharpshooters Whiteflies	8 0 – 16 0
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) 0 days Maximum amount of product allowed per crop season 16 0 fluid ounces/Acre (0 5 lb AI/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	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers/Sharpshooters Whiteflies	3 2
For suppression of Scales	
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	
Restrictions	
Pre Harvest Interval (PHI) 7 days Minimum interval between sprays 7 days Maximum amount of product allowed per crop season 9 6 fluid ounces/Acre (0 3 lb AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging	

STONE FRUIT

Apricot Cherry (including sweet and tart) Nectarine Peach Plum (including Chickasaw Damson and Japanese) Plumcot Prune (fresh and dried)

PRE PLANT ROOT DIP APPLICATIONS	
Pests	Fluid ounces/10 gallons root dip solution
For control of Black peach aphid (infesting roots)	1 0
Application Methods	
Mix this product at a rate of 1 0 fluid ounce per 10 gallons of water Thoroughly wet bare root transplant to slightly above the graft union by soaking roots in this product's solution for up to 5 minutes Allow solution to dry on roots and transplant trees as soon as possible following treatment	
SOIL APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids (including Woolly apple aphid) Leafhoppers	8 0 – 12 0
Application Methods	
Apply specified dosage of this product in the following method Chemigation into root zone through low pressure drip trickle	

SUB LABEL A COMMERCIAL AGRICULTURE

micro sprinkler or equivalent equipment		
Restrictions		
Pre Harvest Interval (PHI) 21 days Maximum amount of product allowed per crop season 12 0 fluid ounces/Acre (0 38 lb AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging		
FOLIAR APPLICATIONS		
Pests	Fluid ounces/100 gallons	Fluid ounces/Acre
For control of Aphids Green June beetle Japanese beetle Leafhoppers/Sharpshooters Plant bugs Rose chafer San Jose scale	0 8	1 6 – 3 2
For control of Cherry fruit fly (maggot of Eastern & Western)		2 4 – 3 2
For suppression of Plum curculio Stinkbugs		3 2
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		
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 AI/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 crop season 16 0 fluid ounces/Acre (0 50 lb AI/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		

TREE NUTS (except Almonds)		Beechnut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert Hickory nut Macadamia nut Pecan Pistachio Walnut (black and English)
SOIL APPLICATIONS ¹		
Pests	Fluid ounces/Acre	
For control of Aphids Leafhoppers/Sharpshooters Mealybugs Spittlebugs Termites Two lined spittlebugs Whiteflies	8 0 – 16 0	
For suppression of Thrips (foliage feeding only)	16 0	
For suppression of disease symptoms of 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 line of the tree canopy Apply this product in a minimum of 10 gallons per acre using multiple shanks on both sides of trees Ensure product placement is below sod or orchard floor debris 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		

SUB LABEL A COMMERCIAL AGRICULTURE

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 rates 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 crop season 16 0 fluid ounces/Acre (0 50 lb AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging ¹ Soil Application in Tree Nut orchards is not permitted in California unless otherwise directed by state approved 24(c) labeling	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids (except Black pecan aphid) Leafhoppers/Sharpshooters Phylloxera spp (leaf infestations) Spittlebugs Whiteflies	1 4 – 2 8
For control of Black pecan aphid Mealybugs San Jose scale ¹	3 2
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	
¹ Applications 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 crop season 11 5 fluid ounces/Acre (0 36 lb AI/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	

BANANA and PLANTAIN	
SOIL APPLICATIONS ¹	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers	8 0 – 16 0
For suppression of Scales	
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) 0 days Maximum amount of product allowed per crop season 16 0 fluid ounces/Acre (0 50 lb AI/A) ¹ This use is not permitted in CA unless otherwise directed by state approved 24(c)labeling	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers Thrips	3 2
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	

SUB LABEL A COMMERCIAL AGRICULTURE

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 crop season 16.0 fluid ounces/Acre (0.5 lb. AI/A)

TROPICAL FRUIT Acerola Atemoya ¹ Avocado Biriba ¹ Black sapote Canistel Cherimoya ¹ Custard apple ¹ Feijoa Jaboticaba Guava Llama ¹ Longan Lychee Mamey sapote Mango Papaya Passionfruit Persimmon Pulasan Rambutan Sapodilla Soursoy ¹ Spanish lime Star apple Starfruit Sugar apple ¹ Wax jambu	
SOIL APPLICATIONS¹	
Pests	Fluid ounces/Acre
For control of Aphids Avocado lacebug Leafhoppers Whiteflies	12.0 – 16.0
For suppression of Scales Thrips (foliage feeding thrips only)	16.0
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 crop season 16.0 fluid ounces/Acre (0.50 lb. AI/A) ¹ Soil application use on noted crops is not permitted in California unless otherwise directed by state approved 24(c) labeling	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Leafhoppers/Sharpshooters Mealybugs Thrips Whiteflies	3.2
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 crop season 16.0 fluid ounces/Acre (0.5 lb. AI/A) DO NOT apply during bloom or within 10 days prior to bloom or when bees are actively foraging	

34/57

SUB LABEL A COMMERCIAL AGRICULTURE

OTHER CROPS

Christmas Trees	
SOIL APPLICATIONS¹	
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 required for activity. This product can be incorporated most readily when applied to moist soil. Apply specified dosage 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 (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 crop season: 16.0 fluid ounces/Acre (0.50 lb. AI/A)	
¹ This use is not permitted in California unless otherwise directed by state approved 24(c) labeling.	
FOLIAR APPLICATIONS	
Pests	Fluid ounces/Acre
For control of Aphids Adelgids Sawflies	1.6 – 3.2
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 crop season: 16.0 fluid ounces/Acre (0.5 lb. AI/A)	

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 <i>Phylloxera populana</i>	
Application Methods	
Apply specified dosage of this product in one of the following methods	
1 Chemigation through low pressure drip irrigation OR	
2 For narrow row cutting orchards/nurseries used for plant propagation shank into root zone followed by adequate irrigation to promote uptake Adequate irrigation depends on soil moisture level at application Under dry conditions 0.25 inch/acre is recommended	
Remarks	
For Cottonwood leaf beetle protection against damage will occur when application is made early season when beetles first begin feeding Larger trees may require earlier treatment as a result of slower uptake For <i>Phylloxera</i> apply early in the year from break of dormancy through May	
Restrictions	
Maximum amount of product allowed per crop season 16.0 fluid ounces/Acre (0.50 lb. AI/A)	
¹ This use is not permitted in California unless otherwise directed by state approved 24(c) labeling	
CUTTING/WHIP APPLICATIONS ¹	
Pests	Soaking Solution Fluid ounces needed per 100 gallons

SUB LABEL A COMMERCIAL AGRICULTURE

For control of Cottonwood leaf beetle	6 65 to 13 3 (unhydrated cuttings/whips) 13 3 to 20 0 (partially hydrated cuttings/whips)
For suppression of Aphids <i>Phylloxera populana</i>	13 3 (unhydrated cuttings/whips) 20 0 (partially hydrated cuttings/whips)
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	
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 crop season 16 0 fluid ounces/Acre (0 5 lb AI/A) ¹ This use is not permitted in California unless otherwise directed by state approved 24(c) labeling	
FOLIAR APPLICATIONS¹	
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 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 AI/A) DO NOT apply during bloom or with 10 days prior to bloom or when honeybees are actively 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

POULTRY HOUSING STRUCTURES	
Pests	Fluid ounces / 1 000 ft²
For control of Darkling beetles Hide beetles (Dermestids)	3 0 (90 ml)
Application 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	

SUB-LABEL A COMMERCIAL AGRICULTURE

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 weeks 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	
Pests	Fluid ounces / Gallon
For control of Nuisance ants	0 125 – 0 25
	(3/4 – 1 5 TSP)
Application 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	

SUB LABEL A COMMERCIAL AGRICULTURE**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

SUB LABEL A COMMERCIAL AGRICULTURE

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 PARTICULAR TRADE 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 BY THE BUYER USER OR ITS CUSTOMERS TO THE 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

NUPRID is a registered trademark of Nufarm Americas Inc

All other trademarks that appear on this label which are not owned by Nufarm Americas Inc or its subsidiaries are the property of their respective owners

(RV120712)

GROUP **4A** 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 imidazolidinimine

40.4%

OTHER INGREDIENTS

59.6%

TOTAL

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
150 HARVESTER DRIVE
BURR RIDGE IL 60527
800-455 2000



NET CONTENTS _____ GALS (_____ Liters)

**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 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 waterproof material such as barrier laminate butyl rubber nitrile rubber neoprene rubber natural rubber polyethylene polyvinylchloride (PVC) or viton

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear

Long sleeved shirt and long pants

Chemical resistant gloves made of any waterproof material such as barrier laminate butyl rubber nitrile rubber neoprene rubber natural rubber polyethylene polyvinylchloride (PVC) or viton

- 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

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	<ul style="list-style-type: none"> • 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

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 or weeds **DO NOT** apply this product or allow it to drift to blooming crops or weeds if bees are visiting 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

41/57

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

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.

DIRECTIONS FOR USE

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

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC), or viton
- 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.

42/57

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

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 Observe the most restrictive label statements of various tank mix products used **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

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

43/57

- 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 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.
- 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.

SUB LABEL B NURSERY GREENHOUSE and LANDSCAPE ORNAMENTALS

44/57

Drift

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

RESTRICTIONS AND LIMITATIONS

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

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 <u>Larvae of</u> Adelgids Aphids Japanese beetles (adults) Lacebugs Leaf beetles (including Elm Viburnum) Leafhoppers/Sharpshooters Leaf miners Mealybugs Sawfly larvae Whiteflies	0.75 (22 ml)
For suppression of Thrips	
Application Methods	
Mix product with the required amount of water and apply 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 spreader/sticker is recommended. If concentrate or mist type spray equipment is used, apply an amount of product on the treatment area equivalent to the amount that would be used in a dilute application. This insecticide has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and other commonly used insecticides. The physical compatibility of this product may vary with different sources of pesticide products and local cultural practices. Any tank mixture which has not been previously tested must be prepared on a small scale (pint or quart jar) using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.	
Remarks	
Start treatments prior to establishment of high pest populations and reapply on an as needed basis.	
Restrictions	
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.	

45/57

SUB LABEL B NURSERY GREENHOUSE and LANDSCAPE ORNAMENTALS

Peppers Potatoes Rape Greens Sorghum Sugarbeets Tomatillo and Tomato		
BROADCAST APPLICATION		
Pests	Fluid ounces/1 000 FT²	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)
Application Methods		
Mix required amount of product in sufficient water to uniformly and accurately cover the treatment 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 lbs AI) per acre per year by broadcast application to outdoor ornamentals 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 Eucalyptus longhorned borer ¹ Flatheaded borers (including Bronze birch and Alder) ¹ Japanese beetles Lace bugs Leaf beetles (including Elm and Viburnum) Leafhoppers/Sharpshooters Leafminers Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae Soft scales White grub larvae Whiteflies	TREES per inch of trunk diameter (DBH) 0.05 – 0.20 fluid ounces (1.5 – 6.0 ml) ²
	SHRUBS per foot of shrub height 0.05 – 0.10 fluid ounces (1.5 – 3.0 ml)
	FLOWERS and GROUDCOVER 0.23 – 0.30 fluid ounces (7.0 – 9.0 ml) / 1000 FT ²
For suppression of Armored scales Thrips	Use the high rate
Application methods for TREES and SHRUBS	
Soil injection Mix the required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Keep the treated area moist for 7 to 10 days. DO NOT use less than 4 holes per tree or shrub.	
Specific Soil Injection methods for trees and large shrubs	
GRID System	Holes must be spaced on 2.5 foot centers in a grid pattern extending to the drip line of the tree
CIRCLE System	Apply in holes evenly spaced in circles (use more than one circle dependent upon the size of the tree) beneath the drip line of the tree extending 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
Soil Drench Uniformly apply the dosage in no less than 10 gallons of water per 1 000 square feet as a drench around the base of the tree or shrub directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root.	

46/57

SUB LABEL B NURSERY GREENHOUSE and LANDSCAPE ORNAMENTALS

zone
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 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 lbs AI) per acre per year
Application methods for FLOWERS and GROUND COVER
Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. For control of target pest immediately irrigate following application to established plants
Bark Media Media with 30 / or more bark content may confer a shorter period 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 Chafers (Northern masked Southern masked European) Green June beetle Japanese beetle May or June beetle Oriental beetle <i>Phyllophaga spp</i>	0.23 – 0.30 (7.0 – 9.0 ml)	10.0 – 12.8 (0.625 – 0.8 pints)
For control of Mole crickets ¹	0.30 (9.0 ml)	12.8 (0.8 pints)
For suppression of Chinchbugs ²		
Application Methods		
Apply this product in sufficient water to provide adequate distribution over the treatment area. The use of accurately calibrated equipment normally used for the application of soil insecticides is required. Use equipment which will produce a uniform coarse spray droplet. Use a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly. Irrigation or rainfall must occur within 24 hours after application to move the active ingredient through the thatch. DO NOT mow turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.		
Remarks		
For control of grubs, billbugs and annual bluegrass weevil, make application prior to egg hatch of the target pest. Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application. ¹ For control of Mole crickets, make application prior to or during the peak egg hatch period. When adults or large nymphs are present and actively tunneling, make a curative insecticide application with the application of this product. See tank mixing section above for general instructions on tank mixtures. ² For suppression of Chinchbugs, make application prior to or during the hatching of the first instar nymphs.		
Restrictions		
Maximum application rate per acre per year: 0.8 pints (12.8 fluid ounces) (0.4 lb of active ingredient) DO NOT make application when treatment area is waterlogged or soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treatment area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.		

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

47/57

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 <u>Larvae of</u> Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass ataenius Chafers (Northern masked Southern masked European) European crane fly Green June beetle Japanese beetle May or June beetle Oriental beetle <i>Phyllophaga spp</i>	0.23 – 0.30 (7.0 – 9.0 ml)	10.0 – 12.8 (0.625 – 0.8 pints)
For control of Mole crickets ¹	0.30 (9.0 ml)	12.8 (0.8 pints)
For suppression of Chinchbugs ²		
Application Methods		
Apply this product in sufficient water to provide adequate distribution over the treatment area The use of accurately calibrated equipment normally used for the application of soil insecticides is required Use equipment which will produce a uniform coarse spray droplet use a low pressure setting to eliminate off target drift Check calibration periodically to ensure that equipment is working properly Irrigation or rainfall must occur within 24 hours after application to move the active ingredient through the thatch DO NOT mow turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected		
Remarks		
For control of grubs European crane fly billbugs and annual bluegrass weevil make application prior to egg hatch of the target pest Consult your local turf state Agricultural Experiment Station or State Extension Service Specialists for more specific information regarding timing of application ¹ For control of Mole crickets make application prior to or during the peak egg hatch period When adults or large nymphs are present and actively tunneling make a curative insecticide application with the application of this product See tank mixing section above for general instructions on tank mixtures ² For suppression of Chinchbugs make application prior to or during the hatching of the first instar nymphs		
Restrictions		
Maximum application rate per acre per year 12.8 fluid oz (0.8 pints) (0.4 lb of active ingredient) DO NOT make application when treatment area is waterlogged or soil is saturated with water Adequate distribution of the active ingredient cannot be achieved when these conditions exist The treatment area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile		

48/57

SUB LABEL B NURSERY GREENHOUSE and LANDSCAPE ORNAMENTALS

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.

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

49/57

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

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

Pests	Ornamental and vegetable plants ⁵ grown in containers		
	Container size (inches)	Herbaceous species including vegetable plants ⁵ (1 or 2 plants/pot)	Woody perennials Herbaceous species including vegetable plants ⁵ (3 or more/pot)
		# of Containers treated with 1 0 fluid oz (30 ml)	
For control of Adelgids Aphids Fungus gnats (larvae only) ¹ Japanese beetles (adults) Lacebugs Leaf Beetles (including Elm and Viburnum leaf beetles) Leafhoppers (including glassy winged sharpshooter) Leafminers Mealybugs Psyllids Root mealybugs ² Root weevil complex (such as Apopka Black vine Citrus root weevils) ³ Soft scales Thrips (suppression) ⁴ Whiteflies White grub larvae (such as Japanese beetle Masked chafer European chafer Oriental beetle Asiatic garden beetle)	2	3000	2000
	3	2000	1350
	4	1500	1000
	5	1200	800
	6	1000	650
	7	850	550
	8	750	500
	9	675	450
	10	600	400
	11	550	350
	12	500	300
	Application method		
	Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container Apply according to label directions Follow application with moderate irrigation Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching		
	Ornamental and vegetable plants⁵ grown in flats benches or beds		
	0 34 fl oz (10 mL) per 1 000 square feet		
	Application method		
	Mix required amount in sufficient water to uniformly cover the area being treated Do not use less than 2 gallons of mixture per 1 000 square feet Apply as a broadcast treatment and incorporate into the medium before planting or apply after plants are established To optimize control lightly water the treated areas if application is made to established plants Allow no leaching or runoff for 10 days after application		
Remarks			
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			

Pests	Containerized plants	
	Container Size (gallons)	# of Containers treated with 1 0 fluid oz (30 ml)
For control of Adelgids	1	244 – 340

50/57

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

Aphids	2	210 – 280
Fungus gnats (larvae only) ¹		
Japanese beetles (adults)	3	185 – 220
Lacebugs		
Leaf Beetles (including Elm and Viburnum)	5	110 – 160
Leafhoppers/Sharpshooters		
Leafminers	7	75 – 100
Mealybugs		
Psyllids	10	45 – 60
Root mealybugs ²		
Root weevil complex (such as Apoka Black vine Citrus root) ³	15	30 – 40
Soft scales		
Thrips (suppression) ⁴	20	15 – 20
Whiteflies		
White grub larvae (such as Japanese beetle Masked chafers European chafer Oriental beetle Asiatic garden beetle)		
Application method		
Apply in sufficient water to wet the potting medium. Make applications prior to egg hatch of the target pest. Irrigate moderately after application to move the active ingredient into the root zone.		
Remarks		
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.		

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 of the row using a band width six (6) inches wider than the actual root ball diameter to be dug. DO NOT allow bands in adjacent rows to overlap.		
Remarks		
Mowing of the vegetation in the area to be treated to a height of 3 inches or less prior to application will improve the consistency of control.		
Apply May through July. For target pest control, treatment must be followed by rainfall or irrigation.		
¹ For grub control in areas of turf, apply as a broadcast application using 0.25 – 0.34 fluid ounces (7 – 10 ml) per 1 000 square feet (10.9 – 12.8 fluid ounces / Acre).		
Restrictions		
DO NOT use less than 2 gallons of spray volume per 1 000 square feet (85 GPA).		
DO NOT exceed 12.8 fluid ounces / acre per year (0.4 lbs A/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

5/1/57

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

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 Foliage Plants Groundcovers Interior Plantscapes		
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) Leafhoppers/Sharpshooters Leaf miners Mealybugs Sawfly larvae Whiteflies	0.75 (22 ml)	
For suppression of Thrips		
Nuisance Ant Management Use this product to control aphids, scale insects, mealybugs and other sucking pests on ornamentals to limit the honeydew available as a food source for nuisance ant populations. Applications can then be supplemented with residual sprays, bait placements or other ant control tactics to further reduce ant populations.		
Application Methods Mix product with the required amount of water and apply 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 spreader/sticker is recommended. If concentrate or mist type spray equipment is used, use an equivalent amount of product on the area sprayed as would be used in a dilute application. This insecticide has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers and other commonly used insecticides. The physical compatibility of this product may vary with different sources of pesticide products and local cultural practices. Any tank mixture which has not been previously tested must be prepared on a small scale (pint or quart jar) using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.		
Remarks Start treatments prior to establishment of high pest populations and reapply on an as needed basis.		
BROADCAST APPLICATION		
Pests	Fluid ounces/1,000 FT ²	Fluid ounces/Acre
For control of White grub larvae such as Japanese beetle larvae Chafers Phyllophaga spp Asiatic garden beetle Oriental beetle	0.23 – 0.30 (7.0 – 9.0 ml)	10.0 – 12.8 (0.625 – 0.8 pints)
Application Methods Mix required amount of product in sufficient water to uniformly and accurately cover the treatment area. DO NOT use less than 2 gallons of water per 1,000 sq ft.		
Remarks Irrigate thoroughly to incorporate this insecticide into the upper soil profile.		
Restrictions DO NOT apply more than 0.8 pints (0.4 lbs AI) per acre per year by broadcast application to outdoor ornamentals. DO NOT use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial production fruit and nut trees. DO NOT apply to Landscape Ornamentals and Plantings through any irrigation system.		

52/57

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

Trees Shrubs Flowers and Groundcover	
SOIL APPLICATION	
Pests	USE RATES
For control of Adelgids Aphids Black vine weevil larvae Emerald ash borer ¹ Eucalyptus longhorned borer ¹ Flatheaded borers (including Bronze birch and Alder) ¹ Japanese beetles Lace bugs Leaf beetles (including Elm and Viburnum) Leafhoppers/Sharpshooters Leafminers Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae Soft scales White grub larvae Whiteflies	TREES per inch of trunk diameter (DBH) 0.05 – 0.20 fluid ounces (1.5 – 6.0 ml) ²
	SHRUBS per foot of shrub height 0.05 – 0.10 fluid ounces (1.5 – 3.0 ml)
	FLOWERS and GROUDCOVER 0.23 – 0.30 fluid ounces (7.0 – 9.0 ml) / 1000 FT ²
For suppression of Armored scales Thrips	Use the high rate
Application methods for TREES and SHRUBS	
Soil Injection Mix the required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Keep the treated area moist for 7 to 10 days. DO NOT use less than 4 holes per tree or shrub.	
Specific Soil Injection methods for trees and large shrubs	
GRID System	Holes must be spaced on 2.5 foot centers in a grid pattern extending to the drip line of the tree
CIRCLE System	Apply in holes evenly spaced in circles (use more than one circle dependent upon the size of the tree) beneath the drip line of the tree extending 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
Soil Drench Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree or shrub directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.	
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 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 lbs AI) per acre per year	
Application methods for FLOWERS and GROUNDCOVER	
Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. Irrigate immediately following application to established plants.	

SUB LABEL B NURSERY GREENHOUSE and LANDSCAPE ORNAMENTALS

Pomefruits Apple Crabapple Loquat Mayhaw Pear Pear (oriental) Quince		
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 needed after petal fall is complete		
Remarks		
The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees. ¹ For control of Rosy apple aphid, apply prior to leafrolling caused by the pest. ² For late season (preharvest) control of Leafhopper species, apply this product while most Leafhoppers are in the nymphal stage. ³ For first generation Leafminer control, make 1 st application as soon as petal fall is complete. Greatest Leafminer control will result from the earliest possible application. For 2 nd and succeeding generations of Leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A 2 nd application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. This product will not control late state larvae. ⁴ For control of Mealybugs, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the Mealybugs. ⁵ For San Jose scale, time applications to the crawler stage. Treat each generation.		
Restrictions		
DO NOT apply more than 3.0 fluid ounces (0.09 lbs AI) per acre in a single application. DO NOT make more than 5 applications. Allow 10 or more days between applications. Allow at least 7 days between last application and harvest. DO NOT use on Pomefruits grown for commercial production. DO NOT use in California for control on Pears.		

Pecan trees		
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		
Make foliar applications as pests begin to build before populations become extreme. Two applications at a 10 to 14 day interval may be required to achieve control. Scout and retreat if needed. Thorough uniform coverage of foliage is necessary for optimal control. Addition of an organosilicone based spray adjuvant at a rate not to exceed the adjuvant manufacturer's recommended use rate may improve coverage.		
Remarks		
The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.		
Restrictions		
DO NOT apply more than 9.0 fluid ounces (0.28 lbs AI) per acre per year. DO NOT make more than 3 applications per year. Allow 10 or more days between applications. DO NOT use on Pecans grown for commercial production. DO NOT use on Pecans in California unless directed by state approved 24(c) labeling.		

SUB LABEL B NURSERY GREENHOUSE and LANDSCAPE ORNAMENTALS

Grapes		
FOLIAR APPLICATION		
Pests	USE RATES	
For control of Leafhoppers/Sharpshooters Mealybugs	0.75 fluid ounces (22 ml) / 100 gallons of water	1.5 fluid ounces/ Acre (45 ml)
Application methods		
Apply specified dosage of this product as a foliar spray using 200 gallons of water per acre		
Restrictions		
DO NOT apply more than 3.0 fluid ounces (0.09 lbs AI) per acre per year Allow 14 or more days between applications Application can be made up to and including the day of harvest DO NOT use on Pecans grown for commercial production DO NOT use on Pecans in California unless directed by state approved 24(c) labeling		

SUB LABEL B NURSERY, GREENHOUSE and LANDSCAPE ORNAMENTALS

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

56/57

SUB LABEL B NURSERY GREENHOUSE and LANDSCAPE ORNAMENTALS

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 PARTICULAR TRADE 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 ARISING 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 BY THE BUYER USER OR ITS CUSTOMERS TO THE 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

NUPRID is a registered trademark of Nufarm Americas Inc

All other trademarks that appear on this label which are not owned by Nufarm Americas Inc or its subsidiaries are the property of their respective owners

(RV120712)

LABEL HISTORY

FILE NAME	REVISION	COMMENT
000228 00528 20090626 MASTER	RV062609	EPA APPROVAL
000228 00528 20101201 Revised_label	RV120110	Removal of Almond use
000228 00528 20110125 Revised_label	RV012511	Changes per EPA memo
000228 00528 20110207 MASTER	RV020711	EPA APPROVAL
000228 00528 20110207 MASTER	RV020711	Addressed typos for Hawaii – 01/20/2012
000228 00528 20121121 EPA Amendment	RV112112	EPA Amendment – Linear Application Chart
000228 00528 20121207 EPA Amendment	RV120712	EPA Corrections