GROUP 4A INSECTICIDE

Nuprid® 2SC

SOIL/FOLIAR INSECTICIDE

FOR USES IN PEST MANAGEMENT AND CONTROL OR SUPPRESSION OF INSECTS THAT MAY VECTOR PLANT HEALTH DISEASES AND MAINTENANCE OF PLANT HEALTH

ACTIVE INGREDIENT:	
Imidacloprid, 1 [(6-Chloro-3-pyridinyl)methyl]-*N*-nitro-2-imidazolidinimine	21.4%
OTHER INGREDIENTS:	78.6%
TOTAL:	100.0%

Contains 2 pounds of imidacloprid per gallon

SHAKE WELL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

CAUTION / PRECAUCION

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

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 228-572

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

For Medical Emergencies Only, Call (877) 325-1840

Manufactured for
Nufarm Americas Inc.
11901 S. Austin Avenue
Alsip, IL 60803

Nufarm Grow a better tomorrow.

1 91662 01357 3

Net Contents
2.5 Gal.
(9.46 L)
Nonrefillable Container

14969000

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION / PRECAUCION

Harmful if absorbed through skin. Harmful if inhaled. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category A).

FIRST AID	
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.
IF INHALED	• Move the person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF SWALLOWED	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to do so by the poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

HOTLINE 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 STATEMENTS

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.
- Remove and wash contaminated clothing before reuse.

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 foraging the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

PROTECTION OF POLLINATORS

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

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

This product can kill bees and other insect pollinators.

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

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

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

When Using This Product Take Steps To:

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

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

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

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 is responsible for considering 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 area and potential surface to groundwater conduits such as field sumps, uncased well heads, sink-holes, 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 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 Instructions for Tree Crops and Vineyards
Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow these spray drift management practices:
- 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 Soil Applications
DO NOT apply within 25 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 using this product on erodible soils, employ Best Management Practices for minimizing runoff.

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.

Resistance Management
Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

This product contains a Group 4A insecticide. Insect biotypes with acquired or inherent resistance to Group 4A may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species.

The active ingredient in this product belongs to the neonicotinoid chemical class. Insect pests resistant to other chemical classes have not shown cross-resistance to this product. To maintain susceptibility to this class of chemistry in insect species with high resistance development potential, it is recommended that for each crop season: 1) only a single, soil application of this product be made; 2) foliar applications of products from this same class not be made following a long residual, soil application of this product, or other neonicotinoid products.

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

Examples of other Group 4A, neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Clutch, Couraze, Gallant, Impulse, Intruder, Leverage, Passada, Provado, Trimax, Trimax Pro and Venom.
Examples of other Group 4A, neonicotinoid products used as soil treatments include: Admire, Admire Pro, Advise, Alias, 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://www.irac-online.org/.

DIRECTIONS FOR USE

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

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

1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

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

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

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

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

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

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

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

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

APPLICATION INSTRUCTIONS

For Foliar Applications

Apply as a directed or broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment and spray adjuvant if necessary to obtain thorough 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. Apply this product with properly calibrated ground or aerial application equipment. Minimum spray volumes, unless otherwise specified on crop specific application instructions sections, are 10 gallons/Acre by ground applications and 5 gallons/Acre through aerial equipment. This product may also be applied by overhead chemigation (see additional CHEMIGATION DIRECTIONS FOR USE section below) if allowed in crop specific application instruction section.

For Soil Applications

Apply this product to direct active ingredient into the seed or root-zone of crop. Failure to place this product into root-zone may result in loss of control or delay in onset of activity. This product may be applied with ground or chemigation application. **DO NOT** apply with aerial application equipment. Broadcast, foliar applications are only recommended to seedling flats or trays, or where product is intended to be washed from foliage to soil prior to drying on foliage.

Optimum activity results from applications to the root-zone of plants to be protected. The earlier this product is available to a developing plant, the earlier the protection begins. This product is continuously taken into the roots over a long period of time and the systemic nature of this product allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in extended residual activity, the control of insects and the prevention and/or reduction of virus transmission or symptom expression, and plant health benefits. The rate applied affects the length of the plant protection period. Higher listed rates are recommended when infestations occur later in crop development, or where pest pressure is continuous. This product will generally not control insects infesting flowers, blooms or fruit. Additional crop protection may be required for insects feeding in or on these plant parts and for insects not listed in the crop-specific, pests controlled sections of this label.

Suppression, or less than complete residual control of certain diseases and insect pests including reduced feeding, may also result from applications of this product. Residual control of these pests/diseases may require supplemental control measures.

Use of this product on crops grown for production of true seed intended for private or commercial planting is not permitted unless otherwise directed by state-specific 24(c) labeling. Additional information on this product and other questions may be obtained from the Cooperative Extension Service, PCAs, or local Nufarm representatives.

Pre-mix with water or other appropriate diluent prior to application. Keep this product and water suspension agitated to avoid settling.

RESTRICTION: DO NOT apply more than 0.5 lbs active ingredient per acre, per year, regardless of formulation or method of application, unless specified within a crop-specific, Application Instructions section for a given crop.

Mixing Instructions

To prepare the application mixture, add a portion of the required amount of water to the tank and then with agitation add this product. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. This product may also be used with other pesticides and/or fertilizer solutions. **Please see Compatibility below.** When tank mixtures of this product and other pesticides are involved, prepare the tank mixture as specified above and follow suggested Mixing Order below.

Mixing Order

When pesticide mixtures are needed, add wettable powders first, then this product and other flowable (suspension concentrate) products second, and emulsifiable concentrates last. Ensure good agitation as each component is added. **DO NOT** add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

Compatibility

Test compatibility of the intended mixture before adding this product to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order, to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Poor mixing or formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used. For further information, contact your local Nufarm representative.

CHEMIGATION - DIRECTIONS FOR USE

Refer to DIRECTIONS FOR USE section before proceeding with chemigation application.

Types of Irrigation Systems

For Soil Application

Chemigation applications of this product may only be made to crops through chemigation systems as specified in crop-specific application sections and only through low-pressure systems unless specifically recommended for a given crop. **DO NOT** apply this product through any other type of irrigation system.

For Foliar Application

Chemigation applications of this product may be made to crops through overhead sprinkler chemigation systems if specified in crop-specific instruction sections. **DO NOT** apply this product through any other type of irrigation system.

Water Volume

Make chemigation applications of this product as concentrated as possible. Retention of this product on target site of insect infestation is necessary for optimum activity. **DO NOT** chemigate this product in water volumes exceeding 0.10 inch/Acre.

Uniform Water Distribution and System Calibration

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

Chemigation Monitoring

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

Drift

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

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 manually 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 should 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 the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection 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.

ROTATIONAL CROPS*
Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. 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.
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: Onion and bulb vegetables
12-MONTH PLANT-BACK: All Other Crops
* Cover crops for soil building or erosion control may be planted anytime, but do not graze or harvest for food or feed.

FIELD CROPS
APPLICATION RATES

COTTON - SOIL

Pests Controlled	Rate fluid ounces/ 1,000 row-feet	Rate fluid ounces/Acre
Cotton aphid Plant bugs Thrips Whiteflies	1.3	17.0 to 21.1 (Depending on row-spacing)
Restrictions: Pre-Harvest Interval (PHI): **14 days** Maximum amount allowed per year: **21.1 fluid ounces/Acre** (0.33 lb AI/Acre) Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient per acre per season, including seed treatment as Gaucho®, soil and foliar uses. **DO NOT** graze treated fields after any application of this product. Please see Resistance Management section of this label.		

(continued)

Applications:
Apply specified dosage in one of the following methods:
1. In-furrow spray during planting directed on or below seed;
2. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
3. Chemigation into root zone through low-pressure drip or trickle irrigation.

COTTON - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Cotton aphids Cotton fleahoppers Plant bugs (excludes *Lygus hesperus*) Banded-winged whitefly Green stink bug Southern green stink bug Bollworm/Budworm (ovicidal effect)	2.0 to 4.0
Pests Suppressed	
Lygus bugs (*Lygus hesperus*) Whiteflies (other than banded-winged whitefly)	3.0 to 4.0

Restrictions:
Pre-Harvest Interval (PHI): **14 days**
Minimum interval between applications: **7 days**
Maximum amount allowed per year: **20.0 fluid ounces/Acre** (0.31 lb. AI/A) **DO NOT** graze treated fields after any application of this product.
Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient per acre per season, including seed treatment as Gaucho®, soil and foliar uses.
DO NOT graze treated fields after any application of this product. Please see Resistance Management section of this label.

Applications:
This product may be applied through properly calibrated ground, aerial or chemigation application equipment.

Tank Mix Specifications

Pests Controlled (In addition to pests listed above)	This Product Rate fluid ounces/Acre	Bidrin® 8* Rate fluid ounces/Acre
For early season control of: Thrips	2.0 to 3.0	1.6 to 3.2
For mid to late season control of: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator	2.0 to 3.0	4.0 to 8.0

Restrictions (In addition to Restrictions listed above):
*Refer to the Bidrin® 8 product label for specific use instructions; follow all restrictions and precautions that appear on the label.

PEANUT - SOIL [1/]

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies	16.0 to 24.0
Pests Suppressed	**Rate fluid ounces/Acre**
Thrips	16.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **14 days**
Maximum amount allowed per year: **24.0 fluid ounces/Acre** (0.38 lb. AI/Acre)

Applications:
Apply specified dosage in one of the following methods:
1. In-furrow spray during planting directed on or below seed;
2. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Important Note:
Increases in Tomato spotted wilt virus (TSWV) incidence have been observed with applications of this product on multiple varieties of peanut. This may also be the case with other tospoviruses, or other viruses transmitted by various thrips species or perhaps, other pests. Prior to applying this product to peanuts, Nufarm recommends consultation with the State, Cooperative Extension Service, or Nufarm representative, for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or other tospovirus are endemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia, Tomato spotted wilt virus index, before applying this product.

[1/] Use not permitted in California unless otherwise directed by state-specific 24(c) labeling

PEANUT - FOLIAR [1/]

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies	3.0

Restrictions:
Pre-Harvest Interval (PHI): **14 days**
Minimum interval between applications: **5 days**
Maximum amount allowed per year: **8.4 fluid ounces/Acre** (0.13 lb. AI/Acre)

[1/] Use not permitted in California unless otherwise directed by state-specific 24(c) labeling

POTATO - SOIL

Pests Controlled	Rate fluid ounces/1,000 row-feet	Rate fluid ounces/Acre
Aphids Colorado potato beetle Flea beetles Leafhoppers Potato psyllid	0.9 to 1.3	13.0 to 20.0
Pests / Diseases Suppressed		
Symptoms of: Potato leaf roll virus (PLRV) Potato yellows Net necrosis (PLRV) Wireworms (with in-furrow spray at planting)	0.9 to 1.3	13.0 to 20.0

(continued)

Restrictions:
Maximum amount allowed peryear: **20.0 fluid ounces/Acre** (0.31 lb AI/Acre)

Applications:
Apply specified dosage in one of the following methods:
1) In-furrow spray during planting directed on seed pieces or seed potatoes;
2) Subsurface side-dress on both sides of the row covered with 3 or more inches of soil;
3) Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil;
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.

POTATO * - Seed Piece Treatment

Pests Controlled	Rate fluid ounces/100 lbs seed	Rate fluid ounces/Acre
Aphids Colorado potato beetle Flea beetles Leafhoppers Potato psyllid Wireworms (seed piece protection)	0.4 to 0.8	8.0 to 16.0
Pests / Diseases Suppressed		
Symptoms of: Potato leaf roll virus (PLRV) Potato yellows Net necrosis (PLRV)	0.8	16.0

Restrictions:
Maximum amount allowed per year: **20.0 fluid ounces/Acre** (0.31 lb AI/Acre)
DO NOT use treated seed pieces for food, feed, or fodder.
DO NOT apply any subsequent application of this product (in-furrow), or any other imidacloprid product following an imidacloprid seed-piece treatment.

Applications:
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.

* Based on a seeding rate of 2000 lbs/acre.

POTATO - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids Colorado potato beetle Flea beetles Leafhoppers Potato Psyllids	3.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **7 days**
Maximum amount allowed per year: **12.8 fluid ounces/Acre** (0.2 lb. AI/A)

Application:
Apply this product through properly calibrated ground and aerial application equipment.

SOYBEANS- FOLIAR [1/]

Pests Controlled	Rate fluid ounces/Acre
Aphids Bean leaf beetle Cucumber beetles/Rootworm adults Japanese beetle (adults) Leafhoppers Whiteflies	3.0
Restrictions: Pre-Harvest Interval (PHI): **21 days** Minimum interval between applications: **7 days** Maximum amount allowed per year: **9.0 fluid ounces/Acre** (0.14 lb. AI/A) **Application:** Apply this product through properly calibrated ground and aerial application equipment.	

[1/] Use not permitted in California unless otherwise directed by state-specific 24 (c) labeling.

TOBACCO - SOIL

Pests Controlled	Rate fluid ounces/1,000 plants (as seedling tray drench)	Rate fluid ounces/1,000 plants (in-furrow or transplant-water)
Aphids Flea beetles	1.0	1.4
Mole crickets Whiteflies Wireworms	1.4 to 2.8	1.8 to 2.8
Pests / Diseases Suppressed		
Cutworms Symptoms of: Tomato spotted wilt virus (TSWV)	1.4 to 2.8	1.8 to 2.8
Restrictions: Pre-Harvest Interval (PHI): **14 days** Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre) **Applications:** 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. 2) In-furrow spray or transplant-water drench during setting. 3) Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. **Important Notes:** 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.		

TOBACCO - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids	1.6 to 3.2
Flea beetles Japanese beetle	3.2
Restrictions: Pre-Harvest Interval (PHI): **14 days** Minimum interval between applications: **7 days** Maximum amount allowed per year: **18.0 fluid ounces/Acre** (0.28 lb. AI/A) **Application:** Apply this product through properly calibrated ground and aerial application equipment.	

VEGETABLE and SMALL FRUIT CROPS
APPLICATION INSTRUCTIONS

For Foliar Applications
Apply specified rate per acre as a broadcast or directed foliar spray as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. This product may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests. Crops contained with certain Crop Groups recognized by USEPA are subject to change. Please refer to USEPA website (www.epa.gov) for latest Crop Groups.

CUCURBIT VEGETABLES - SOIL [1/]

Crops of Crop Group 9 including: 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*)

Field Application Instructions	
Pests Controlled	**Rate fluid ounces/Acre**
Aphids Cucumber beetles Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	16.0 to 24.0
Pests / Diseases Suppressed	
Bacterial wilt (as vectored by various cucumber beetles) Leaf silvering resulting from whitefly feeding	16.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed percrop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)

Applications:
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;
2) In-furrow spray directed on or below seed;
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;
4) Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5) Post-seeding drench, transplant-water drench, or hill drench;
6) Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

Planthouse Application Instructions [2/]	
Pests Controlled	**Rate fluid ounces/1,000 plants**
Aphids Whiteflies	0.1

Restrictions:
Maximum amount applied in the planthouse: **0.1 fluid ounce** (0.00156 lb AI)/**1,000 plants**.
Maximum number of applications in planthouse: **1**

Applications:
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;

(continued)

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.

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 Notes:
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.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2/] Not for use in California unless permitted by state-specific 24(c) labeling.

BULB VEGETABLE (*Allium* spp.)

Group 3-07 - SOIL 1 [1/2]

Crops of Crop Group 3-07 Including: Chive (fresh leaves), Chinese chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic (common group, great-headed group, serpent group), Kurrat group, Leek group (including common, lady's and wild), Lily (bulb), Onion (bulb and green leaves including: common group, Beltsville bunching, Chinese bulb, fresh, green, macrostem, Pearl group, potato onion group, tree onion-tops, Welsh-tops), Shallot, plus cultivars, varieties, and/or hybrids of these.

Pests Controlled	Rate fluid ounces/1,000 plants
Thrips (foliage feeding thrips only)	14.0

Bulb Vegetable - Soil Applications:
Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
4. Post-seeding drench, transplant-water drench, or hill drench.

Bulb Vegetable - Soil Application Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed per crop season: **14.0 fluid ounces/Acre** (0.5 lb. AI/Acre)
Applications made to higher organic matter soils may result in reduced or shortened activity on pest.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2/] Not for use in California

GREENHOUSE VEGETABLES - SOIL [1/]

Cucumber and Tomato ONLY (Mature plants in production greenhouses)

Pests Controlled	Rate fluid ounces/1,000 plants
Aphids Whiteflies	1.4

Restrictions:
Pre-Harvest Interval (PHI): **0 days**
Maximum number of applications per crop season: **1**

Applications:
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. Make applications only to plants grown in field-type soils, potting media, or mixtures thereof.

DO NOT apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically.

DO NOT apply to immature plants since phytotoxicity may occur.

Important Notes:
Applications should be made 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 (*Onius* spp.) 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.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

FRUITING VEGETABLES – SOIL [1/]

Crops of Crop Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and sweet) Tomato, Pepinos, Tomatillo

Field Application Instructions	
Pests Controlled	**Rate fluid ounces/Acre**
Aphids Colorado potato beetle Flea beetles Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	Okra and Pepper 16.0 to 32.0 Other Crops 16.0 to 24.0
Pests / Diseases Suppressed	
Symptoms of: Tomato mottle virus Tomato spotted wilt virus Tomato yellow leaf curl virus	Okra and Pepper 16.0 to 32.0 Other Crops 16.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed on pepper and okra crops per crop season: **32.0 fluid ounces/Acre** (0.5 lb AI/Acre)
Maximum amount allowed on other fruiting vegetable crops per crop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)

Applications:
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;
2) In-furrow spray directed on or below seed;
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;
4) Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5) Post-seeding drench, transplant-water drench, or hill drench;
6) Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

Planthouse Application Instructions [2/]	
Pests Controlled	**Rate fluid ounces/1,000 plants**
Aphids Whiteflies	0.1

Restrictions:
Maximum amount applied in the planthouse: **0.1 fluid ounce** (0.00156 lb AI)/**1,000 plants**.
Maximum number of applications in planthouse: **1**

Applications:
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;
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.

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. Increased number of applications in planthouse may result in significant plant injury. Transplants should be handled carefully during setting to avoid dislodging treated potting media from roots.

Important Notes:
Not all varieties of fruiting 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.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2/] Not for use in California unless permitted by state-specific 24(c) labeling.

FRUITING VEGETABLES- FOLIAR [1/]

Crops of Crop Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and sweet). Tomato, Pepinos, Tomatillo

Pests Controlled	Rate fluid ounces/Acre
Aphids Colorado potato beetle Leafhoppers Whiteflies	3.0 to 5.0
Pepper weevil (Pepper only)	5.0

Restrictions:
Pre-Harvest Interval (PHI): **0 days**
Minimum interval between applications: **5 days**
Maximum amount allowed per crop season: **15.4 fluid ounces/Acre** (0.24 lb. AI/A)

Applications:
Apply this product through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for optimum control.

For pepper weevil, apply specified dosage of this product by ground equipment only, timing applications prior to a damaging pest population becoming established. Good coverage of foliage and fruit is necessary for optimal control. 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. Higher listed rate should be used when targeting adult whiteflies.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

GLOBE ARTICHOKE - SOIL[1/]

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers	16.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Maximum amount allowed per year: 32.0 fluid ounces/Acre (0.5 lb AI/Acre)

Applications:
Apply specified dosage in the following method:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray at planting directed on or below seed.

[1/] Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

GLOBE ARTICHOKE - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers	3.2 to 8.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **14 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb. AI/A)

Application:
Apply this product through properly calibrated ground and aerial application equipment.

HERBS - SOIL

Crops of Crop Subgroup 19A including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Camomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (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.

Pests Controlled	Rate fluid ounces/Acre
Aphids Flea Beetles Leafhoppers Whiteflies	16.0 to 24.0
Pests Suppressed	
Thrips (foliage-feeding thrips only)	16.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **14 days**
Maximum amount allowed per crop season: **24.0 fluid ounces/Acre (0.38 lb AI/Acre)**

Applications
Apply specified dosage in one of the following methods:
1) In-furrow spray during planting directed on or below seed;
2) In-furrow spray or transplant-water drench during setting or transplanting;
3) Shanked-into or below eventual seed-line;
4) Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Important Notes:
Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Nufarm strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

HERBS - FOLIAR

Crops of Crop Subgroup 19A including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Camomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (loaf), 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.

Pests Controlled	Rate fluid ounces/Acre
Aphids Flea Beetles Leafhoppers Whiteflies	2.8

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **5 days**
Maximum amount allowed per crop season: **8.4 fluid ounces/Acre** (0.13 lb. AI/Acre)

Applications:
This product may be applied through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for optimum control. The addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's use rate may improve coverage and control.

Important Notes:
Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Nufarm strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

HEAD and STEM BRASSICA VEGETABLES and LEAF BRASSICA GREENS, plus TURNIP TOPS - SOIL[1/]

Crop of Crop Group 5 including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (*gai lon*) broccoli, Chinese (*bok choy*) cabbage, Chinese (*napa*) cabbage, Chinese mustard (*gai choy*) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, plus Turnip tops (leaves)

Pests Controlled	Rate fluid ounces/Acre (on 36 inch rows)
Aphids Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	10.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed per crop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)

Applications:
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;
2) In-furrow spray directed on or below seed;
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;
4) Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5) Post-seeding drench, transplant-water drench, or hill drench;
6) Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

HEAD and STEM BRASSICA VEGETABLES and LEAF BRASSICA GREENS - FOLIAR [1/]

Crops of Crop Group 5 including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (gai lon) broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach and Rape greens

Pests Controlled	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	3.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **5 days**
Maximum amount allowed per crop season: **15.4 fluid ounces/Acre** (0.23 lb. AI/A)

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

LEAFY GREENS VEGETABLES – SOIL [1/]

Crops of Crop Subgroup 4A plus Watercress including: 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), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach)), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	Rate fluid ounces/Acre (on 36 inch rows)
Aphids Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	10.0 to 24.0

(continued)

Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed percrop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)

Applications:
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;
2. In-furrow spray directed on or below seed;
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;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. This product must be incorporated into root-zone.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

LEAFY GREENS VEGETABLES – FOLIAR [1/]

Crops of Crop Subgroup 4A plus Watercress including: 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), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach), Watercress (commercial production only; applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	3.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **5 days**
Maximum amount allowed per crop season: **15.4 fluid ounces/Acre** (0.23 lb. AI/A)
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.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

LEAFY PETIOLE VEGETABLES - SOIL [1/]

Crops of Crop Subgroup 4B including: Cardoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only), Florence fennel (including sweet anise, sweet fennel, finocchio), Rhubarb, Swiss chard

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	10.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **45 days**
Maximum amount allowed per crop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)

Applications:
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;
2) In-furrow spray directed on or below seed;
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;
4) Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5) Post-seeding drench, transplant-water drench, or hill drench;
6) Subsurface side-dress on both sides of each row. This product must be incorporated into root zone.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

LEGUME VEGETABLES - SOIL [1/]

Crops of Crop Group 6 Except soybean, dry including:
Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean, Bean (*Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)
Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)
Bean (*Vigna* spp., includes 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 (*Pisum* spp., includes 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]

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	16.0 to 24.0
Pests / Diseases Suppressed	
Symptoms of: Bean common mosaic virus (BCMV) Bean golden mosaic virus (BGMV) Beet curly top hybrigeminivirus (BCTV)	16.0 to 24.0
Restrictions: Pre-Harvest Interval (PHI): **21 days** Maximum amount allowed per crop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre) **Applications:** 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; 2) In-furrow spray at planting directed on or below seed; 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; 4) In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting; 5) As a post-seeding drench, transplant drench, or hill drench.	

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

LEGUME VEGETABLES - FOLIAR [1/]

Crops of Crop Group 6 Except soybean, dry, including:
Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean, Bean (*Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)
Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)
Bean (*Vigna* spp., includes 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 (*Pisum* spp., includes 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]

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies	2.8
Restrictions: Pre-Harvest Interval (PHI): **7 days** Minimum interval between applications: **7 days** Maximum amount allowed per crop season: **8.4 fluid ounces/Acre** (0.13 lb. AI/A) **Application:** Apply this product through properly calibrated ground and aerial application equipment.	

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

ROOT VEGETABLES - SOIL [1/]

Crops of Crop Subgroup 1B except Sugar beet including: Beet (garden)[2/], Burdock (edible)[2/], Carrot[2/], Celeriac[2/], Chervil (turnip-rooted)[2/], Chicory[2/], Ginseng, Horseradish, Kava[2/], Parsley (turnip-rooted), Parsnip[2/], Radish[2/], Oriental radish (diakon)[2/], Rutabaga[2/], Salsify (oyster plant), Salsify (black)[2/], Salsify (Spanish), Skirret and Turnip[2/].

Pests Controlled	Rate fluid ounces/1,000 row-feet	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	0.7 to 1.7	10.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed per crop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)
Maximum number of applications per crop season: **1**

Applications:
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;
2) In-furrow spray (rate specified per 1,000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting;
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.

Important:
The rate applied affects the length of control. Use listed 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.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2/] Tops or greens from these crops may be utilized for food or feed.

TUBEROUS and CORM VEGETABLE - SOIL [1/]

Crops of Crop Subgroup 1C including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter & sweet)[2/], Chayote (root), Chufa, Dasheen (taro)[2/], Ginger, Leren, Sweet potato, Tanier (cocoyam)[2/], Turmeric, Yam bean (jicama, manoic pea), Yam (true)[2/]

For applications on potato see Field Crops section for Potato - Soil

Pests Controlled	Rate fluid ounces/1,000 row-feet	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Thrips (foliage-feeding thrips only) Whiteflies	0.7 to 1.7	10.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI) from planting application: **3 days** (leaves); **125 days** (corms)
Maximum amount allowed per crop season: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)
Maximum number of applications per crop season: **1**

Applications:
Apply specified dosage of this product in one of the following methods:
1) In-furrow spray (rate specified per 1,000 row-feet) over planting material (hulis) or shanked-in 1 to 2 inches below hulis depth at planting;
2) Side-dress not more than 0.6 fluid ounce/1,000 row-feet no later than 45 days after-planting. Observe same PHI as above.

Important:
The rate applied affects the length of control. Use listed higher rates within the specified rate range where infestations occur later in crop development, or where pest pressure is continuous. Rates of this product less than 0.7 fluid ounce/1,000 row-feet may 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.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2/] Tops or greens from these crops may be utilized for food or feed.

ROOT, TUBEROUS and CORM VEGETABLES – FOLIAR [1/]

Crops of Crop Group 1 (Except for Sugar beet) including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden)[2/], Burdock (edible)[2/], Canna (edible, Queensland arrowroot), Carrot[2/], Cassava (bitter & sweet)[2/], Celeriac[2/], Chayote (root), Chervil (turnip-rooted)[2/], Chicory[2/], Chufa, Dasheen (taro)[2/], Ginger, Ginseng, Horseradish, Leren, Parsley (turnip-rooted), Parsnip[2/], Radish[2/], Oriental radish (daikon)[2/], Rutabaga[2/], Salsify (black)[2/], Salsify (oyster plant), Salsify (Spanish), Skirret, Sweet potato, Tanier (cocoyam)[2/], Turmeric, Turnip[2/], Yam bean (jicama, manoic pea), Yam (true)[2/]

For applications on potato see Field Crops section for Potato - Foliar

Pests Controlled	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	2.8

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **5 days**
Maximum amount allowed per crop season: **2.8 fluid ounces/Acre** (0.044 lb AI/A) on radish; **8.4 fluid ounces/Acre** (0.13 lb. AI/A) on other crops
Maximum applications of this product per crop season: **1** on radish; **3** on other crops.

Application:
Apply this product through properly calibrated ground and aerial application equipment.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2/] Tops or greens from these crops may be utilized for food or feed.

STRAWBERRY - SOIL [1/]

Annual and Perennial Crops

Pests Controlled	Rate fluid ounces/Acre
Aphids Whiteflies	24.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **14 days**
Maximum amount allowed per crop season: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)

Applications:
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;
2) As a plant material or plant hole treatment just prior to, or during transplanting.
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.

The rate applied affects the length of control. Use higher listed rates where infestations may occur later in crop development or where pest pressure is continuous.

[1/] Do not use both pre and post harvest application methods on the same crop in the same season.

Post-harvest Use on Perennial Crops [1/]

Pests Controlled	Rate fluid ounces/Acre
White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle, Oriental beetle)	16.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **14 days**
Maximum amount allowed per year: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)

(continued)

Applications:
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;
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 should be equivalent to the width of the anticipated fruiting bed;
3) As a chemigation application with 600 to 1,000 gallons of water followed by 0.10 to 0.25 inch irrigation.

Important Notes:
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.

[1/] Do not use both pre and post harvest application methods on the same crop in the same season.

STRAWBERRY – FOLIAR [1/]

Pests Controlled	Rate fluid ounces/Acre
Aphids Spittlebugs Whiteflies	3.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **5 days**
Maximum amount allowed per crop season: **9.1 fluid ounces/Acre** (0.14 lb. AI/A)
DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Application:
Apply this product through properly calibrated ground and aerial application equipment.

[1/] Do not use both pre and post harvest application methods on the same crop in the same season.

SUGARBEET – SOIL [1/] (For Use Only in CA)

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies Flea beetles	6.0 to 12.0
Pests / Diseases Suppressed	
Symptoms of: Western yellows / Beet curly top hybrigeminivirus (BCTV)	6.0 to 12.0

Restrictions:
Maximum amount allowed per year: **12.0 fluid ounces/Acre** (0.18 lb AI/Acre)

Applications:
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.

Important Notes:
The lower listed rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.

[1/] Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

NUPRID 2SC SOIL/FOLIAR INSECTICIDE CONVERSION CHART FOR LINEAR APPLICATION								
RATE fluid ounces/Acre	**RATE fluid ounces/1,000 row-feet Based on average row spacing (in inches):**							
	10	**15**	**20**	**25**	**30**	**35**	**40**	**45**
10	0.19	0.29	0.38	0.48	0.57	0.67	0.76	0.86
12	0.23	0.34	0.46	0.57	0.69	0.80	0.92	1.03
14	0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21
16	0.31	0.46	0.61	0.77	0.92	1.07	1.22	1.38
18	0.34	0.52	0.69	0.86	1.03	1.21	1.38	1.55
20	0.38	0.57	0.76	0.96	1.15	1.34	1.53	1.72
22	0.42	0.63	0.84	1.05	1.26	1.47	1.68	1.89
24	0.46	0.69	0.92	1.15	1.38	1.61	1.84	2.07
26	0.50	0.75	0.99	1.24	1.49	1.74	1.99	2.24
28	0.54	0.80	1.07	1.34	1.61	1.87	2.14	2.41
30	0.57	0.86	1.15	1.43	1.72	2.01	2.29	2.58
32	0.61	0.92	1.22	1.52	1.84	2.14	2.45	2.75

Important: 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 0.7 fluid ounce/1,000 row- feet.

TREE, BUSH and VINE CROPS APPLICATION INSTRUCTIONS

Application Instructions - For Foliar Applications Only

Apply specified rate per acre as a broadcast or directed foliar spray as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. This product may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests. Aerial application of this product may result in slower activity and reduced control relative to results from ground application. For trees and vine crops, application rates are based on full size, mature trees or vines.

BANANA and PLANTAIN - SOIL

Pests Controlled	**Rate fluid ounces/Acre**
Aphids Leafhoppers	16.0 to 32.0
Pests / Diseases Suppressed	
Scales	16.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **0 day**
Maximum amount allowed per year **32.0 fluid ounces/Acre** (0.5 lb AI/Acre)

Applications:
Apply specified dosage of this product in the following method:
Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

BANANA and PLANTAIN - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Thrips	6.4

Restrictions:
Pre-Harvest Interval (PHI): **0 day**
Minimum interval between applications: **14 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb. AI/A)

Applications:
Apply specified dosage of this product as a broadcast or directed spray to infested area insuring thorough coverage. This product may be applied through properly calibrated ground or aerial application equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

Important Note:
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.

BUSHBERRY -SOIL

Crops of Crop Subgroup 13B including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, and Salal

Pests Controlled	Rate fluid ounces/Acre
Japanese beetle (adults, feeding on foliage) White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	16.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
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;
2) 18-inch band on each side of the row followed with 0.25 inch of irrigation immediately after application.

For optimal grub control, apply this product to control 1st or 2nd instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st. For optimum 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 should be applied or received within 24 hours of application of this product to facilitate movement into the soil and into the root zone.

BUSHBERRY - FOLIAR

Crops of Crop Subgroup 13B including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, and Salal

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters	2.4 to 3.2
Blueberry maggot Japanese beetles (adults) Thrips (foliage-feeding thrips only)	4.8 to 6.4

Restrictions:
Pre-Harvest Interval (PHI): **3 days**
Minimum interval between applications: **7 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb. AI/A)
Maximum number of applications of this product per year: **5**
Maximum application volume (water): 20.0 GPA - ground; 5.0 GPA - aerial
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Application:
Apply this product through properly calibrated ground and aerial application equipment.

CANEBERRY - SOIL

Crops of Crop Subgroup 13A including:
Blackberry (*Rubus eubatus*, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these).
Raspberry (black and red, *Rubus occidentalis, Rubus strigosus, Rubus idaeus*).

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies	16.0 to 32.0
Rednecked cane borer	24.0 to 32.0
Thrips (foliage-feeding thrips only)	16.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage in one of the following methods:

1) Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2) Basal, soil drench in a minimum of 500 gallons solution per acre.

CITRUS - SOIL (Nursery and Greenhouse Container Stock)

Crops of Crop Group 10 including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Tangelo, Satsuma mandarin, and other cultivars and/or hybrids of these.

Pests Controlled	Rate mL/ "citra pot" (0.1ft^3 container media)
Aphids Asian citrus psyllid Blackfly Citrus leafminer Leafhoppers/Sharpshooters Mealybugs Scales Whiteflies Citrus root weevil (larval complex)	0.75 to 1.15
Pests / Plant Health Diseases Suppressed	
Citrus thrips (foliage-feeding thrips only)	1.15

Citrus (Containerized) - Soil Applications

For commercial nursery production in standard "citra pot" of 0.1 ft^3 volume

Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. Basal, soil drench in a minimum of 30 milliliters (mLs) total solution per "citra pot".

Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. Make treatment at planting/ transplanting prior to insect infestation. Retreat if necessary but do not apply more than 6.9 mLs per plant per season. For control of larvae of the citrus root weevil complex, apply prior to neonate larvae entering potting media.

Application - For citrus production with other container volumes

Determine volume of container and calculate required dosage based on 1.15 mLs / 0.1 ft^3 potting media. Apply calculated dosage per container as described above. Do not exceed rate of 6.9 mLs / plant per crop season regardless of container size.

Restrictions:

Pre-Harvest Interval (PHI): **0 day**

Maximum allowed per application: **1.15 mLs / 0.1 ft^3 container media.**

Maximum allowed per crop season: **6.9 mLs / plant.**

Do not apply pre-bloom or during bloom or when bees are foraging.

Applications:

1. **Application: For citrus production with other container volumes:** Determine volume of container and calculate required dosage based on 1.15 mLs / 0.1 ft^3 potting media. Apply calculated dosage per container as described above. Do not exceed rate of 6.9 mLs / plant per crop season regardless of container size.
2. **Phytotoxic Response Potential:** If you have no experience with this product on containerized citrus of a specific variety/hybrid, treat only a few plants and observe for phytotoxic effects for up to 60 days prior to treating entire nursery.
3. **PLEASE NOTE:** Not all varieties or hybrids of citrus have been tested for phytotoxic response following an application of this product.

CITRUS - SOIL (Field)

Crops of Crop Group 10 including: 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 (*Casimiroa* spp.), and other cultivars and/or hybrids of these.

Pests Controlled	Rate fluid ounces/Acre
Aphids Asian citrus psyllid Blackfly Citrus leafminer Leafhoppers/Sharpshooters Mealybugs Scales Termites (FL only) Whiteflies	16.0 to 32.0

(continued)

Pests / Plant Health Diseases Suppressed	Rate fluid ounces/Acre
Citrus nematode Symptoms of: Citrus tristeza virus (CTV) through vector control Citrus yellows Thrips (foliage-feeding thrips only)	32.0

Restrictions:
Pre-Harvest Interval (PHI): **0 day**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)

Applications:
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. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Soil should 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;
2) Soil surface band spray on both sides of the tree. Have bands 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;
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 recommended for trees up to 8 feet tall;
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;
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.

CITRUS - FOLIAR

Crops of Crop Group 10 including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, White sapote (*Casimiroa* spp.), and other cultivars and/or hybrids of these listed.

Pests Controlled	Rate fluid ounces/100 gallons	Rate fluid ounces/Acre
Aphids Asian citrus psyllid Blackfly Leafhoppers/ Sharpshooters Leafminers Mealy bugs Scales Whiteflies	2.8 to 4.0 (for dilute applications)	8.0 to 16.0 (depending on tree size, target pest and infestation pressure)
Thrips (foliage-feeding thrips only)	2.8 to 4.0	8.0 to 16.0

Restrictions:
Pre-Harvest Interval (PHI): **0 days**
Minimum interval between applications: **10 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb. AI/A)
DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.

Applications:
Apply specific dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. This product may be applied through properly calibrated ground or aerial equipment. Aerial application of this product may result in slower activity and reduced control to results from ground application.
Scales - time applications to the crawler stage. Treat each generation.

Where concentrated applications are appropriate, increase the spray solution concentration to apply an equivalent rate per acre to that applied in the diluted application. The 16.0 fluid ounce/Acre rate is based on full sized trees. This rate may be reduced proportionally for smaller trees.

COFFEE - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Leafminer	16.0 to 32.0
Pests Suppressed	
Scales	16.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage in one of the following methods:
1) Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
2) Subsurface side-dress shanked into the root zone on both sides of the plants followed by irrigation;
3) Basal, soil drench in sufficient water to insure incorporation into the root zone followed by irrigation.

COFFEE - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies	6.4
Pests Suppressed	
Scales	6.4

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **7 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb. AI/A)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage of this product as a broadcast or directed spray to infested area insuring thorough coverage. This product may be applied through properly calibrated ground or aerial application equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

CRANBERRY - SOIL

Pests Controlled	Rate fluid ounces/Acre
Rootgrubs (Scarabaeidae) Rootworms (Chrysomelidae)	16.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **30 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
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;
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.

(continued)

Important Notes:
Best control may be achieved when application is made post-bloom immediately after bees are removed. Applications should 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.

GRAPE - SOIL

American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate fluid ounces/Acre
European fruit lecanium Leafhoppers/Sharpshooters Mealybugs *Phylloxera** spp	16.0 to 32.0
Pests / Plant Health Diseases Suppressed	
Grapeleaf skeletonizer Nematodes Pierce's disease	24.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **30 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)

Applications:
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;
2) Subsurface side-dress shanked into the root zone on both sides of the plants followed by irrigation;
3) Hill drench in sufficient water to insure incorporation into the root zone followed by irrigation.
4) For suppression of nematodes, apply 32 fluid ounces in a single application or two 16-fluid ounce applications on a 30 to 45-day interval. Make treatments only by 1) chemigation into root zone through above ground low pressure drip, tickle, micro sprinkler or equivalent equipment or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root zone of the plant. Repeated and regular use of this product over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

Important Notes:
For optimum results, make application between bud-break and the pea-berry stage. A total of 32 fluid ounces/acre is recommended 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

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

GRAPE - FOLIAR

American bunch grape, Muscadine grape and Viniferous grape

Pests Controlled	Rate fluid ounces/Acre
Leafhoppers/Sharpshooters Mealybugs	2.4 to 3.2
Grapeleaf skeletonizer	3.0 to 3.2

Restrictions:
Pre-Harvest Interval (PHI): **0 days**
Minimum interval between applications: **14 days**
Maximum amount allowed per year: **6.4 fluid ounces/Acre** (0.1 lb. AI/A)

Applications:
This product may be applied by ground application only.

HOPS - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids	6.4 to 19.2

Restrictions:
Pre-Harvest Interval (PHI): **60 days**
Maximum amount allowed per year: **19.2 fluid ounces/Acre** (0.30 lb AI/Acre)

Applications:
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;
2) Subsurface side-dress shanked into the root zone on both sides of the plants followed by irrigation;
3) Hill drench in sufficient water to insure incorporation into the root zone followed by irrigation.

Use higher dosages where extended residual control is desired or for treating larger vines or vines with dense foliage volume.

HOPS – FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids	6.4

Restrictions:
Pre-Harvest Interval (PHI): **28 days**
Minimum interval between applications: **21 days**
Maximum amount allowed per year: **19.2 fluid ounces/Acre** (0.3 lb. AI/A)

Application:
Apply this product through properly calibrated ground and aerial application equipment.

POME FRUIT - SOIL

Crops of Crop Group 11 including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate fluid ounces/Acre
Aphids (including woolly apple aphid) Leafhoppers	16.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed per year: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage of this product in the following method:

Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

POME FRUIT - FOLIAR

Crops of Crop Group 11 including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate fluid ounces/100 gallons	Rate fluid ounces/Acre
Leafhoppers	0.8 to 1.6	3.2 to 6.4
Aphids (except woolly apple aphid) Apple maggot Leafminers San Jose scale	1.6	6.4
FOR PEARS ONLY Mealybugs Pear psylla	4.0	16.0

(continued)

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **10 days**
Maximum of this product allowed per year: **32.0 fluid ounces/Acre** (0.50 lb. AI/A)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Application:
Applications targeting apple maggot should be combined with manufacturer's listed rate of a sticker.

Important:
Leafhoppers - apply low listed rate for low to moderate populations of white apple leafhoppers and high listed rate for high populations or for other leafhopper species. Apply this product while most leafhoppers are in the nymphal stage.

Leafminer - for first generation leafminer control, make application after pollination is complete and bees are no longer present in the orchard. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, better control will be obtained from applications made early in the adult flight against egg and early instar larvae. A second 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 instar larvae.

Mealybugs - apply maximum gallonage for tree with ground equipment. Ensure good spray coverage of the trunk and scaffolding limbs or other resting sites of mealybugs.

Rosy apple aphid - apply prior to leafrolling caused by rosy apple aphid.

San Jose scale - time applications to the crawler stage. Treat each generation.

POMEGRANATE - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters Whiteflies	16.0 to 32.0

Restrictions:
Pre-Harvest Interval (PHI): **0 day**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Application:
Apply specified dosage of this product in the following method:
Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

POMEGRANATE - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters Whiteflies	6.4
Pests Suppressed	
Scales	6.4

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **7 days**
Maximum amount allowed per year: **19.2 fluid ounces/Acre** (0.3 lb. AI/A)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

STONE FRUIT - SOIL

Crops of Crop Group 12 including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese), Plumcot, Prune (fresh and dried)

In-field, Soil Application

Pests Controlled	Rate fluid ounces/Acre
Aphids (including woolly apple aphid) Leafhoppers	16.0 to 24.0

Restrictions:
Pre-Harvest Interval (PHI): **21 days**
Maximum amount allowed per year: **24.0 fluid ounces/Acre** (0.38 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage of this product in the following method:
Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Pre-plant, Root Dip Application

Pests Controlled	Rate fluid ounces/10 gallons root-dip solution
Black peach aphid (infesting roots)	2.0

Important:
Mix this product at a rate of 2.0 fluid ounces 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.

STONE FRUIT - FOLIAR

Crops of Crop Group 12 including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese), Plumcot, Prune (fresh and dried)

Pests Controlled	Rate fluid ounces/100 gallons	Rate fluid ounces/Acre
Aphids Green June beetle Japanese beetle Leafhoppers/Sharpshooters Plant bugs Rose chafer San Jose scale	1.6	3.2 to 6.4
Cherry fruit fly	1.6	4.8 to 6.4
Pests Suppressed		
Plum curculio Stink bugs	1.6	6.4

Restrictions for Apricot, Nectarine, Peach:
Pre-Harvest Interval (PHI): **0 days**
Minimum interval between applications: **7 days**
Maximum amount allowed per year: **19.2 fluid ounces/Acre** (0.30 lb. AI/A)
Minimum application volume (water): 50 GPA - ground application; 25 GPA - aerial application.
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Restrictions for Cherries, Plums, Plumcot, Prune:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **10 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb. AI/A)
Minimum application volume (water): 50 GPA - ground application; 25 GPA - aerial application.
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. This product may be applied through properly calibrated ground or aerial equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

TREE NUTS -SOIL

Crops of Crop Group 14 except Almond: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters Mealybugs Spittlebugs Termites Whiteflies	16.0 to 32.0
Pests / Plant Health Diseases Suppressed	
Pecan scab (from reduction in honeydew deposition)	16.0 to 32.0
Thrips (foliage-feeding thrips only)	32.0

Restrictions:
DO NOT use in Almonds
Pre-Harvest Interval (PHI): **7 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
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;
2) Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site;
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. Product should be applied 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 should follow within 48 hours to promote uptake by root system.
4) For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Utilize sufficient carrier volume to penetrate the soil to a depth of 18 to 24 inches to obtain optimum control. Allow soil to dry following treatment and prior to applying any irrigation.

Use the higher listed 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.

Important Notes:
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.

TREE NUTS- FOLIAR

Crops of Crop Group 14 (except Almond): Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate fluid ounces/Acre
Aphids (except Black pecan aphid) Leafhoppers/Sharpshooters *Phylloxera* spp. (leaf infestations) Spittlebugs Whiteflies	2.8 to 5.6
Black pecan aphid Mealybugs San Jose scale	6.4

(continued)

Restrictions:
DO NOT use in Almonds.
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **6 days**
Maximum amount allowed per year: **23.0 fluid ounces/Acre** (0.36 lb. AI/A)
Minimum application volume (water): 50 GPA - ground application, 25 GPA - aerial application

DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Time applications to control San Jose scale according to crawler stage, treating each successive generation. Two applications on a 10 to 14-day interval may be required to achieve control.

TROPICAL FRUIT - SOIL

Acerola, Atemoya, Avocado, Biriba, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursap, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled	Rate fluid ounces/Acre
Aphids Avocado lace bugs Leafhoppers Whiteflies	24.0 to 32.0
Pests / Diseases Suppressed	
Scales Thrips (foliage-feeding thrips only)	32.0

Restrictions:
Pre-Harvest Interval (PHI): **6 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)
Do not apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage of this product in the following method:
Chemigation through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

TROPICAL FRUIT - FOLIAR

Acerola, Atemoya, Avocado, Biriba, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters Mealybugs Thrips (foliage-feeding thrips only) Whiteflies	6.4
Pests Suppressed	
Scales	6.4

Restrictions:
Pre-Harvest Interval (PHI): **7 days**
Minimum interval between applications: **10 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb. AI/A)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications:
Apply specified dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. This product may be applied through properly calibrated ground or aerial equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

OTHER CROPS - FOLIAR
APPLICATION INSTRUCTIONS

Apply specified rate per acre as a broadcast or directed foliar spray as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. This product may be tank mixed with other insecticides for knock down of pests or for improved control of other pests.

CHRISTMAS TREE - SOIL

Pests Controlled	Rate fluid ounces / Acre
White grub complex (damage from grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and oriental beetle)	16.0 – 32.0

Restrictions:
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.5 lb AI/Acre)

Applications:
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;
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.

Important Notes:
For optimal grub control apply this product during adult flight activity, or up to mid-July, when first instar larvae are present.

CHRISTMAS TREE - FOLIAR

Pests Controlled	Rate fluid ounces / Acre
Aphids Adelgids Sawflies	3.2 to 6.4

Restrictions:
Minimum interval between applications: **7 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb. AI/A)

Applications:
Apply specific dosage of this product as a broadcast or directed spray to infested area ensuring thorough coverage. This product may be applied through properly calibrated ground or aerial equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

Gall-forming adelgids - time applications to coincide with full bud-swell or first bud-break of earliest bud-breaking trees. Once galls form spraying will be ineffective.

POPLAR/COTTONWOOD - SOIL[1/]

(Includes members of the genus *Populus* grown for pulp or timber)

Pests Controlled	Rate fluid ounces / Acre
Aphids Cottonwood leaf beetle	16.0 to 32.0
Pests / Diseases Suppressed	
Phylloxerina popularia	16.0 to 32.0

Restrictions:
Maximum amount allowed at-plant per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

(continued)

Applications:
Apply specified dosage of this product in the following method:

1) Chemigation through low-pressure drip irrigation.
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.

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 *Phylloxerina*, apply early in the year, from break of dormancy through May.

[1/] Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

Cutting/Whip Application Instructions. See details above for Field Application Instructions. [1/]

Pests Controlled	Cutting Whip Soaking Solution fluid ounces of this product needed per 100 gallons
Cottonwood leaf beetle	13.3 to 26.6 (unhydrated cuttings/whips) 26.6 to 40.1 (partially hydrated cuttings/whips)
Pests / Diseases Suppressed	
Aphids *Phylloxerina popularia*	13.3 to 26.6 (unhydrated cuttings/whips) 26.6 to 40.1 (partially hydrated cuttings/whips)

Restrictions:
Maximum amount allowed at-plant per year: **32.0 fluid ounces/Acre** (0.50 lb AI/Acre)

Applications:
Apply this product in one of the following cuttings/whips soaking methods:

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.

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.

Proper care should be taken in disposal of any residual soaking solution. Solution may be applied to existing trees or other registered crops as long as all product label precautions and restrictions are observed.

Important Notes:
Moisture content of cuttings/whips prior to application, 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, drier 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. Soak cuttings/whips in a covered container in absence of UV light. Not all *Populus* spp. clones/varieties/hybrids have been tested for crop safety. Without specific knowledge about a particular *Populus* spp. clone/variety/hybrid, a small number of cuttings/whips of each should be treated and evaluated prior to commercial use.

[1/] Use not permitted in California unless otherwise directed by state-specific 24 (c) labeling.

POPLAR/COTTONWOOD – FOLIAR [1/]

(Includes members of the genus Populus grown for pulp or timber)

Pests Controlled	Rate fluid ounces / Acre
Aphids Leaf beetles	3.2 to 6.4

Restrictions:
Minimum interval between applications: **10 days**
Maximum amount allowed per year: **32.0 fluid ounces/Acre** (0.50 lb. AI/A)
DO NOT apply pre-bloom or during bloom or when bees are foraging.

Applications
Apply specified dosage of this product as a broadcast or directed pray to infested area ensuring thorough coverage. This product may be applied through properly calibrated ground or aerial equipment. Aerial application of this product may result in slower activity and reduced control relative to results from ground application.

[1/] Use not permitted in California unless otherwise directed by state-specific 24(c) labeling.

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]:
IMPORTANT: This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size.

Nonrefillable Containers 5 Gallons or Less
Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons
Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons
Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY 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.

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

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