## SPECIMEN LABEL

# IMIDASTAR® 2LT&0

#### **ACTIVE INGREDIENT:**

-SHAKE WELL BEFORE USING-KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

For non-emergency questions for this product call Albaugh, LLC toll free at 1-800-247-8013

See inside booklet for additional FIRST AID and PRECAUTIONARY STATEMENTS.

Insecticide for foliar and systemic insect control in turfgrass (including sod farms), landscape ornamentals, listed fruit and nut trees and interior plantscapes.

Manufactured for: ALBAUGH, LLC 1525 NE 36th Street, Ankeny, IA 50021



	FIRST AID		
<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass or water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>			
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
In case of emergency call CHEMTREC toll free at 1-800-424-9300. Have a product container or label with you when calling a poison control center or, doctor, or going for treatment.			
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.			

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

#### **Applicators and Other Handlers Must Wear:**

- 1. Long-sleeved shirt and long pants
- 2. Chemical resistant gloves made out of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride ≥ 14 mils, or viton ≥ 14 mils.
- 3. Shoes plus socks

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

#### **ENGINEERING CONTROLS STATEMENTS:**

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

#### **USER SAFETY RECOMMENDATIONS**

#### User should:

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

#### **ENVIRONMENTAL HAZARDS**

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not 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 chemical demonstrates the properties and characteristics associated with chemicals detected in ground-water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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#### 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: <a href="www.npic.orst.edu">www.npic.orst.edu</a> or directly to EPA at: <a href="mailto:beekill@epa.gov">beekill@epa.gov</a>

#### **DIRECTIONS FOR USE**

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

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

See individual sites for specific pollinator protection application restrictions. If none exist under the specific site, for outdoor foliar applications, follow these application directions.



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.



#### FOR NON-AGRICULTURAL USE SITES:

- Do not apply IMIDASTAR® 2L T&O while bees are foraging.
- Do not apply IMIDASTAR® 2L T&O to plants that are flowering.
- Only apply after all flower petals have fallen off.

#### 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 or material spilled for any reason or cause, care-fully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. You may contact Chemtrec at 800-424-9300 for decontamination procedures or any other assistance that may be necessary.

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

**CONTAINER HANDLING: Non-refillable containers (1, 2.5, 30 & 55 gallon):** Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or incineration.

(non-refillable ≤5 gallons): 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.

(non-refillable >5 gallons): 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 or collect rinsate for later use for 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.

#### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker I 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 applied by drenching, 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:

- 1. Coveralls
- 2. Chemical resistant gloves made out of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride ≥ 14 mils, or viton ≥ 14 mils
- 3. Shoes plus socks

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT with-in the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

**RESTRICTION:** Do not formulate this product into other end-use products

#### **APPLICATION TO TURFGRASS**

IMIDASTAR® 2L T&O will control the following soil inhabiting pests and larvae found in turfgrass

PEST	SCIENTIFIC NAME	
Northern & Southern masked chafers	Cyclocephala borealis, C. immaculata, and/or C. lurida	
Asiatic garden beetle	Maladera castanea	
European chafer	Rhizotroqus majalis	
Green June beetle	Cotinis nitida	
May or June beetle	Phyllophaga spp.	
Japanese beetle	Popillia japonica	
Oriental beetle	Anomala orientalis	
Billbugs	Spherophorus spp.	
Annual bluegrass weevil	Hyperodes spp.	
Black turfgrass ataenius	Ataenius spretulus and Aphodius spp	
European Crane Fly	Tipula paludosa	
Mole crickets	scapteriscus spp.	

IMIDASTAR® 2L T&O will suppress cutworms and chinch bugs.

IMIDASTAR® 2L T&O can be applied on turfgrass in the following sites:

Home lawnsGolf coursesPlaygroundsBusiness and office complexesAirportsAthletic fieldsShopping complexesCemeteriesSod farms\*

Multi-family residential complexes Parks

IMIDASTAR® 2L T&O has adequate residual activity that applications can be made preceding the egg laying activity of the target pests.

Best control is achieved when applications are made prior to egg hatch of the pests and when rainfall or irrigation after application will penetrate vertically in the soil column carrying the active ingredient into the zone where insects are normally located. In order to move the active ingredient through the thatch, irrigate if rainfall does not occur within 24 hours after application.

Apply 1.25 to 1.6 pints per acre (equivalent to 0.46 to 0.6 fl oz per 1000 sq ft). Make application prior to egg hatch of grubs, billbugs, annual bluegrass weevil, and European Crane Fry to maximize control.

For chinch bugs (suppression) and mole crickets apply 1.6 pints per acre (equivalent to 0.6 fl oz per 1000 sq ft). For suppression of chinchbugs, make application before the hatching of the first instar nymphs.

For control of mole crickets make application before or during the peak egg hatch period. If adults or large nymphs are actively tunneling, combine applications of IMIDASTAR® 2L T&O with a remedial insecticide. Follow label instructions for other insecticides when tank-mixing.

Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific Information regarding timing of application.

#### **Application Equipment for Use on Turfgrass**

Dilute IMIDASTAR® 2L T&O with enough water to provide adequate volume to promote thorough distribution into the pest zone. Use only accurately calibrated equipment for application to turfgrass. Apply a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Perform calibration on a regular basis to ensure that equipment is distributing product properly.

#### **RESTRICTIONS FOR TURFGRASS USE:**

- Do not exceed a total of 1.6 pints application (0.4 lb of active ingredient) per acre per year.
- Do not allow this product to contact plants in bloom if bees are foraging the treatment area.
- Do not mow turf or lawn area, until after adequate irrigation or rainfall has occurred.
- Keep people and pets off treated area until dry.
- Not for use on grasses grown for seed, or on commercial fruit and nut trees.
- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Do not apply through any irrigation system
- Do not apply to areas which are water logged or saturated, which will not allow penetration into the root zone of the plant.
- \*Use not permitted in Arizona unless otherwise directed by state 24(c) labeling.

#### **APPLICATION TO ORNAMENTALS**

IMIDASTAR® 2L T&O can be applied to ornamental plants in commercial and residential landscapes and interior plantscapes. IMIDASTAR® 2L T&O is a systemic insecticide that is transported within the plant system from the roots to upper foliage. IMIDASTAR® 2L T&O must be applied into a growing area of the plant that allows absorption of the active ingredient. Adding soluble nitrogen type fertilizers to the spray solution when appropriate can promote the uptake of the active ingredient.

Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

The systemic translocation of active ingredient will be slower when applied to woody plants with soil applications. This delay can take 60 days or longer depending on species and size of plant. To offset this, make applications before anticipated pest infestation.

#### **ANT MANAGEMENT PROGRAMS**

Use IMIDASTAR® 2L T&O to control aphids, scale insects, mealybugs and other sucking pests on ornamentals with ant populations because it removes honeydew as a food source. To enhance control of ants, supplement with residual sprays, bait placements or other ant control tactics.

IMIDASTAR® 2L T&O mixes readily with water and may be used in many types of application equipment. Add a commercial spreader/sticker to promote coverage on hard to wet foliage such as holly, pine, or ivy.

IMIDASTAR® 2L T&O is compatible with many commonly used fungicides, miticides, liquid fertilizers, and other insecticides. If applicator has no prior experience with a particular tank mix; check physical compatibility by making a small clear jar test using correct proportions of products to be tank mixed.

#### **RESTRICTIONS FOR ALL ORNAMENTALS:**

- Keep people and pets off treated area until dry.
- Do not apply more than 1.6 pints (0.4 lb of active ingredient) per acre per year.
- Not for use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.
- Do not apply through any irrigation system
- Do not apply to areas which are water logged or saturated, which will not allow penetration into the root zone of the plant.
- Do not apply this product, by any application method, to linden, basswood or other Tilia species

## FOLIAR APPLICATION TO ORNAMENTAL AND NON-BEARING FRUIT & NUT TREES, SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROUNDCOVERS AND INTERIOR PLANTSCAPES

## (Only for Industrial, Commercial Buildings, Residential and Landscaped Planting Areas)

#### TO CONTROL:

Adelgids

Aphids

Honeylocust Plant Bug

Diptera (Including Rhododendron gall midge,

Honeylocust pod gall midge)

Froghopper

Galls (Including Hickory stem gall)

Japanese beetles

Lace bugs

Leaf beetles

(Including elm and viburnum leaf beetles)

Leafhoppers

(Including glassy-winged sharpshooter)

Leafminers (Including Boxwood leafminer)

Mealybugs

**Planthoppers** 

**Psyllids** 

Sawfly larvae

Scales (Including Lecanium, Azalea bark, Calico, Cottony Camellia, Cottony maple, Cottony taxus)

Spittlebugs

Thrips (suppression)

(Including Flower, Pear and Pine thrips)

**Treehoppers** 

Weevils (Including white Pine and Black vine)

Whiteflies

Apply 1.5 fluid ounces (45mL) per 100 gal of water. Make foliar applications before high pest populations become established. Reapply on an as needed basis.

To control White grub larvae, (such as Japanese beetle larvae, Chafers, Phyllophaga spp. Asiatic garden beetle, Oriental beetle) apply 0.46 to 0.6 fluid ounces (14 to 17 mL) per 1000 sq ft.

Make broadcast applications by mixing specified rate in enough water to uniformly cover the treated area. Do not use less than 2 gallons of water per 1000 sq ft. In order to move the active ingredient through the thatch, irrigate if rainfall does not occur within 24 hours after application.

Refer to use directions specific for FLOWERS and GROUND COVERS concerning additional use directions.

#### **RESTRICTION:**

- Do not apply more than 1.6 pints application (0.4 lb of active ingredient) per acre per year.
- Do not apply this product in the state of Oregon, by any application method, to linden, basswood or other *Tilia* species

## SOIL APPLICATION TO ORNAMENTAL AND NON-BEARING FRUIT & NUT TREES, SHRUBS, FLOWERS AND GROUNDCOVERS

(Only For Industrial, Commercial Buildings, Residential, Landscaped Planting Areas) (Including State, National, and Private Wooded and Forested Areas)

#### **TO CONTROL:**

Adelgids

Aphids

Armored scales (suppression)

Black vine weevil larvae

Eucalyptus longhorned borer

Flatheaded borers

(including bronze, alder and emerald ash borers)

Japanese beetles

Lace bugs Leaf beetles

(including elm and viburnum leaf beetles)

Leafhoppers

(including glassywinged sharpshooter)

Leafminers

Mealybugs

Pine tip moth larvae

Plant bugs

Psyllids

Roundheaded borers

(including Asian longhorned beetles)

Royal Palm Bugs

Sawfly larvae

Soft scales

Thrips (suppression)

White grub larvae

Whiteflies

#### For TREES -

Use the following rates as a function of tree diameter at breast height (DBH):

Apply 0.1 - 0.4 fl oz per inch of trunk diameter (DBH). You may use the higher rate (0.3 - 0.4 fl oz) only for trees greater than 15 DBH to control the following pests:

Asian longhorned beetle

**Emerald Ash Borer** 

Eucalyptus longhorned borer

Bronze birch borer

Alder borer

#### **RESTRICTION:**

• Do not apply more than 25.6 fl oz (0.4 lb of active ingredient) per acre per year.

Diameter at Breast Height (D.B.H.) = is measured at 4.5 feet from the ground.

#### **APPLICATION TECHNIQUE:**

#### **SOIL INJECTION:**

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. For concentrate injectors mix required dose with up to 1 gallon of water per DBH inch. Maintain a low pressure and use sufficient solution for distribution of the liquid into treatment zone. Dilution rate may vary depending on equipment used, tree size and application rate. Refer to the instructions for injector equipment being used for guidance.

- **GRID SYSTEM:** Make applications in a grid pattern on 2.5 foot centers within the drip line of the tree.
- **CIRCLE SYSTEM:** Make applications in holes evenly spaced approximately 2 3 feet apart in a circle within the drip line of the tree. Larger trees may require additional application circles.
- **BASAL SYSTEM:** Make applications into holes evenly spaced around the base of the tree trunk no more than 6 to 12 Inches out from the base.

#### **SOIL DRENCH:**

Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the tree, directed to the root zone. Any plastic or other barrier that may prevent drench solution from reaching the root zone must be removed.

#### FOR ALL APPLICATION TECHNIQUES:

- Inject an equal amount of water and solution in each hole.
- Use low pressure and sufficient solution for thorough distribution into the treatment zone.
- Maintain soil moisture for 7 to 10 days.
- Application to trees already heavily infested with borers listed may not prevent the eventual loss of the trees.

#### **RESTRICTIONS FOR TREES:**

- Do not use less than 4 holes per tree.
- No Soil Injection Applications Allowed In Nassau or Suffolk Counties of New York.
- Do not apply more than 25.6 fl oz (0.4 lb of active ingredient) per acre per year.
- Do not apply this product in the state of Oregon, by any application method, to linden, basswood or other *Tilia* species

#### For SHRUBS -

Apply 0.1 to 0.2 fl oz (3 to 6 mL) per foot of shrub height.

#### **APPLICATION TECHNIQUES:**

#### **SOIL INJECTION:**

Apply to individual plants using dosage indicated.

#### **SOIL DRENCH:**

Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

- Mix required dosage in sufficient water to inject an equal amount of solution in each hole.
- Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.
- Maintain soil moisture for 7 to 10 days.

#### **RESTRICTIONS FOR SHRUBS:**

- Do not use less than 4 holes per shrub.
- No Soil Injection Applications Allowed In Nassau or Suffolk Counties of New York.
- Do not apply more than 25.6 fl oz (0.4 lb of active ingredient) per acre per year.

#### For FLOWERS and GROUNDCOVERS -

Apply 0.46 to 0.6 fluid ounces (14 to 17 mL) per 1000 sq ft.

Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established and prior to bloom or after petal fall is complete. If application is made to established plants, irrigate after application.



#### **POME FRUITS** (For Residential Areas Only)

## Includes: Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental), Quince

#### TO CONTROL:

Aphids (except Wooly apple aphid)
Leafhoppers
(including glassy-winged sharpshooter)

Leafminer Mealybugs San Jose Scale

Apply 1.5 fluid ounces (45 mL) per 100 gal

OR

6.0 fluid ounces per acre as foliar spray as needed after petal-fall is complete.

- For control of rosy apple aphid, apply prior to leafrolling caused by the pest.
- For first generation leafminer control, make first application as soon as petal fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is 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. IMIDASTAR® 2L T&O will not control late stage larvae.
- For San Jose Scale, time applications to the crawler stage. Treat each generation.
- For late season (preharvest) control of leafhopper species, apply IMIDASTAR® 2L T&O while most leafhoppers are in the nymphal stage.
- For optimal control of mealybug, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybug.

#### RESTRICTIONS FOR RESIDENTIAL POME FRUITS:

- Do not apply more than 6.0 fluid ounces per acre in a single application.
- Do not make more than 4 applications per year.
- Allow 10 or more days between applications.
- Allow at least 7 days between last application and harvest.
- Not for use in California for control on pears.
- Do not apply pre-bloom or during bloom or when bees are foraging.



#### **PECAN** (For Residential Areas Only)

#### TO CONTROL:

Yellow pecan aphid Pecan spittlebug Black margined aphid Pecan stem phylloxera Pecan leaf phylloxera

Apply 1.5 fl oz (45 ml) per 100 gal

OR

6.0 fl oz/A<sup>1</sup> as a foliar application as pest pressure begins to increase.

Make a second application 10 to 14 days after first if field scouting reveals continued pest pressure. Use of an organosilicone based spray adjuvant at specified rate can insure thorough coverage of foliage.

#### **RESTRICTIONS FOR RESIDENTIAL PECAN TREES:**

- Do not apply more than a total of 18.0 fluid ounces per acre per year.
- Use on pecans not permitted in California unless directed by state 24(c) labeling.
- Allow at least 7 days between last application and harvest.
- Do not make more than 3 applications per year.
- Allow 10 or more days between applications.
- Do not apply pre-bloom or during bloom or when bees are foraging.

#### **GRAPES**

## (For Use Only For Industrial, Commercial Buildings and Residential Planting Areas) TO CONTROL:

Leafhoppers (including glassy-winged sharpshooter) Mealybugs

Apply 1.5 fl oz (45 mL) per 100 gal

OR

3.0 fl oz/A (90 mL/A) as a foliar spray using 200 gallons of water per acre.

#### RESTRICTIONS FOR GRAPES IN RESIDENTIAL, INDUSTRIAL OR COMMERCIAL BUILDING AREAS:

- Do not apply more than a total of 6.0 ounces per acre per year.
- Allow at least 14 days between applications.
- Applications may be applied up to and including day of harvest.



#### **CITRUS**

Citrus and Citrus hybrids, Orange (sweet and sour), Calamondin, Grapefruit, Kumquat, Lemon, Lime, Pummelo, Tangerine, Tangelo (around perimeter of industrial and commercial buildings and on residential areas)

#### TO CONTROL:

Aphids
Asian citrus psyllid
Black fly
Citrus leafminer

Leafhoppers/Sharpshooters Mealybugs Scales Whiteflies

Apply 1.5 fl. oz. (45 ml) Per 100 gallons of water

OR

6.0 fl. oz./A<sup>1</sup>

Apply specified dosage as foliar spray as needed after petal-fall is complete.

#### **REMARKS:**

For first generation leafminer control, make first application as soon as petal-fall in complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is 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.

For late season (preharvest) control of leafhopper species, apply this product while most leafhoppers are in the nymphal stage.

<sup>&</sup>lt;sup>1</sup>The amount of IMIDASTAR® 2L T&O required per acre may very and depends on tree size or volume of foliage. The rates given are based on a standard of 400 gallons of dilute spray solutions per acre for large trees with full foliage. **DO NOT** apply more than 18 fluid ounces of IMIDASTAR® 2L T&O per acre per year.

For control of mealybugs, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybugs.

<sup>1</sup>The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

#### RESTRICTIONS FOR CITRUS IN RESIDENTIAL, INDUSTRIAL OR COMMERCIAL BUILDING AREAS:

- Do not apply more than a total of 6.0 ounces of this product per acre per year.
- Do not make more than 5 applications per year.
- Allow 10 or more days between applications. Allow at least 7 days between last application and harvest.
- Do not apply through any irrigation system.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.



#### **AVOCADO**

## (around perimeter of industrial and commercial buildings and on residential areas)

#### **TO CONTROL:**

Aphids Avocado Lacebug Leafhoppers

Apply 1.5 fl. oz. (45 ml) Per 100 gallons of water

OR

6.0 fl. oz./A<sup>1</sup>

#### **REMARKS:**

<sup>1</sup>The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees

### RESTRICTIONS FOR AVOCADOS IN RESIDENTIAL, INDUSTRIAL OR COMMERCIAL BUILDING AREAS:

- Do not apply more than a total of 6.0 ounces of this product per acre per year.
- Allow at least 14 days between applications
- Allow at least 7 days between application and harvest
- Do not apply through any irrigation system.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

#### **APPLICATION TO GRASSY AREAS IN NURSERIES**

This product can be used for the control of listed soil inhabiting pests of grassy areas of nurseries castanea European chafer including Northern and Southern masked chafers Cyclocephala boreahs C immaculata and/or C lunda Asiatic garden beetle Maladera Rhizotroqus majalis Green June beetle Cotinis nitida May or June beetle Phyllophaga spp Japanese beetle Popillia japonica Oriental beetle Anomala onentalis Billbugs Spherophorus spp Annual bluegrass weevil Hyperodes spp Black turfgrass ataenius Ataenius spretulus and Aphodius spp and mole crickets Scaptenscus spp. This product can also be used for suppression of cutworms and chinchbugs. This product can be used as directed on nursery grass in sites such as under or around field or container grown plants on roadways or other grassy areas in or around nurseries.

The active ingredient in this product has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. The need for an application can be based on historical monitoring of the site previous records or experiences current season adult trapping or other methods. When applications are made prior to egg hatch of the target pests sufficient irrigation or rainfall is needed to allow the movement of the active ingredient through the thatch.

#### **RESTRICTIONS TO GRASSY AREAS IN NURSERIES:**

- DO NOT make application when grassy areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist.
- The treated grassy area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.
- Application cannot exceed a total of 25.6 fluid ounces (1.6 pints) (0.4 lb. of active ingredient) per acre per year.
- Do not allow this product to contact plants in bloom if bees are foraging the treatment area.

#### **Application Equipment for Use on Grassy Areas in Nurseries**

Apply this product in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for the application of soil insecticides is required. Use equipment which will produce a uniform course droplet spray using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly.

GRASSY AREAS OF FIELD AND FOREST NURSERIES			
PEST	USE RATE		
Larvae of			
Annual bluegrass weevil			
Asiatic garden beetle	19.2 to 25.6 fl oz per acre		
Billbugs	(1.2 to 1.6 pt per acre)		
Black turfgrass ataenius			
Cutworms (suppression)	Or		
European chafer			
European crane fly	0.46 to 0.6 fl oz		
Green June beetle	(13 to 17 ml)		
Japanese beetle	per 1,000 sq ft		
Northern masked chafer			
Oriental beetle <i>Phyllophaga</i> spp			
Southern masked chafer			
	25.6 fl oz per acre		
	(1.6 pt per acre)		
Chinabhuga (auppragainn)			
Chinchbugs (suppression)	Or		
Mole crickets			
	0.6 fl oz (17 ml)		
	per 1,000 sq ft		

#### **GRASSY AREAS OF FIELD AND FOREST NURSERIES (cont.)**

#### **Remarks**

For control of grubs billbugs and annual bluegrass weevil make application prior to egg hatch of the target pest. Read APPLICATION EQUIPMENT section of this label.

For suppression of chinchbugs, make application prior to or during the hatching of the first instar nymphs. For control of mole crickets make application prior to or during the peak egg hatch period. When adults or large nymphs are present and actively tunneling, accompany the application of this product with a remedial insecticide. Follow the most restrictive label instructions when tank mixing.

Consult your local turf state Agricultural Experiment Station or State Extension Service Specialists for more specific information regarding timing of application.

#### **RESTRICTIONS:**

- Do not apply more than 25.6 fluid ounces (1.6 pt) (0.4 lb of active ingredient) per acre per year.
- Irrigation or rainfall must occur within 24 hours after application to move the active ingredient through the thatch.
- Do not mow turf or lawn area until after sufficient irrigation or rainfall has occurred.
- Do not allow this product to contact plants in bloom if bees are foraging the treatment area.

#### APPLICATION TO ORNAMENTALS AND VEGETABLE PLANTS

#### (Nurseries, Greenhouses and Interior Plantscapes)

This product is for insect control on ornamental and vegetable plants in nurseries and greenhouses and interior plantscapes. This product is a systemic product and will be translocated upward into the plant system. To assure optimum effectiveness the product must be placed where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable into the solution, may enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications including soil injection drenches and broadcast sprays.

When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. Make application prior to anticipated pest infestation.

**Bark Media** - Media with 30% or more bark content may confer a shorter period of protection when treated with this product.

**Resistance** - Some insects are known to develop resistance to insecticides after repeated use. Because the development of resistance cannot be predicted, the use of this product must conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

#### **Application Equipment for Ornamentals and Vegetable Plants**

Mix product with the required amount of water and apply as specified for the selected use pattern.

When making foliar applications on hard-to-wet foliage such as holly pine or ivy the addition of a spreader/ sticker will improve coverage. If concentrate or mist type spray equipment is used apply an equivalent amount of product on the area sprayed as would be used in a dilute application.

This product has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and other commonly used insecticides. The physical compatibility of this product may vary with different sources of pesticide products and local cultural practices. For any tank mixture that has not been previously tested, prepare on a small scale (pint or quart jar) using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **FOLIAR & BROADCAST APPLICATIONS:**

ORNAMENTALAL TREES (including non-bearing fruit & nut trees), SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROUNDCOVERS, INTERIOR PLANTSCAPES, VEGETABLE PLANTS\* (around field grown nursery and container stock indoor and outdoor ornamentals (including both greenhouse and interior plantscapes) and ornamentals grown in flats, benches or beds.

FOLIAR APPLICATIONS			
PEST	USE RATE	REMARKS	
Adelgids Aphids Japanese beetles (adults) Lace bugs Leaf beetles (including Elm and Viburnum leaf beetles) Leafhoppers (including Glassy winged sharpshooter) Leafminers Mealy bugs Sawfly larvae Thrips (suppression) Whiteflies	1.7 fl oz (50 ml) per 100 gallons of water	Start treatments prior to establishment of high pest populations and reapply on an as needed basis For resistance management purposes.  DO NOT make an imidacloprid foliar application following a soil application in the same crop	

#### **BROADCAST APPLICATIONS**

PEST	USE RATE	REMARKS
White grub larvae (such as Japanese beetle larvae chafers Phyllophaga spp Asiatic garden beetle	0.45 to 0.6 fl oz (13 to 17 ml) per 1,000 sq ft	Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated.
Oriental beetle)		<b>DO NOT</b> use less than 2 gallons of water per 1,000 square feet. Irrigate thoroughly to incorporate this insecticide into the upper soil profile. Refer to specific use directions (found below) for Flowers and Ground Covers.

#### **RESTRICTIONS**

- \*Only for use on the following vegetable plants intended for resale: Broccoli, Chinese, Broccoli, Broccoli
  Raab, Brussel Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale,
  Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets,
  Tomatillo and Tomato
- For outdoor plants grown in ground applications of this product cannot exceed a total of 25.6 fluid ounces (1.6 pints) (0.4 lb of active ingredient) per acre per year

SOIL APPLICATIONS - NURSERY, GREENHOUSE AND INTERIORSCAPE PLANTS				
DECT	USE RATE	APPLICATION SITE		
PEST	TREES			
Adelgids Alder borer Aphids Armored scales (suppression) Asian longhorned beetle Black vine weevil larvae Bronze birch borer Emerald ash borer Eucalyptus longhorned borer Flatheaded borers   (including Bronze birch and Alder) Japanese beetles (adult) Lace bugs Leaf beetles   (including elm and viburnum leaf beetles) Leafhoppers   (including glassy winged   sharpshooter) Leafminers Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae* Soft scales Thrips (suppression) White grub larvae Whiteflies	For TREES Use the following rates as a function of tree diameter at breast height (DBH) Apply 0.1 – 0.4 fl oz (3 to 12 mL) per inch of trunk diameter (DBH) You may use the higher rate (0.3 – 0.4 fl oz) only for trees >15 inches (DBH) to control Asian longhorned beetle Emerald ash borer Eucalyptus longhorned borer Bronze birch borer and Alder borer RESTRICTION DO NOT apply more than 25.6 fl oz (0.4 lb Al) per acre per year. Diameter at Breast Height (DBH) is measured at 4-5 feet from the ground	Soil Injection – GRID SYSTEM - Holes must be spaced on 2-5 foot centers in a grid pattern extending to the drip line of the tree  CIRCLE SYSTEM - Apply in holes evenly spaced in circles (use more than one circle dependent upon the size of the tree) beneath the drip line of the tree extending in from that line  BASAL SYSTEM Space injection holes evenly around the base of the tree trunk no more than 6 to 12 inches out from the base.  Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone Keep the treated area moist for 7 to 10 days. DO NOT use less than 4 holes per tree  NEW YORK SPECIFIC RESTRICTION:  No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York  Soil Drench  Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.  For Control of Specified Borers  Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.  Basal Soil Drench using Slow Release Irrigation Bags (such as Treegator® 15, 20 or 50 Gallon capacity)  Follow manufacturer's instructions for installation and setup of drip irrigation water bag. Fill bag to 1/4 capacity with irrigation water Add the specified rate of this product for the tree diameter to which the bag is attached. Add remaining volume of water needed to fill bag		

Aphids Armored scales (suppression) Asian longhorned beetle Black vine weevil larvae Bronze birch borer Emerald ash borer Eucalyptus longhorned boerer Flatheaded borers (including Bronze birch and Alder) Japanese beetles (adult) Lace bugs Leaf beetles (including glassy winged sharpshooter) Leafminers Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae* Soft scales Thrips (suppression) White grub larvae Whiteflies  per foot of shrub height Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone Keep the treated area moist for 7 to 10 days. DO NOT use less than 4 holes per shrub.  NEW YORK SPECIFIC RESTRICTION No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York  Soil Drench Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.  Basal Soil Drench Using Slow Release Irrigation Bags (such as Treegator® 15 20, or 50 Gallon capacity). Follow manufacturer's instructions for installation and setup of drip irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag to 1/4 capacity with irrigation water bag. Fill bag	SOIL APPLICATIONS - NURSERY, GREENHOUSE AND INTERIORSCAPE PLANTS (cont.)			
Adelgids Alder borer Aphids Armored scales (suppression) Asian longhorned beetle Black vine weevil larvae Bronze birch borer Eucalyptus longhorned borer Flatheaded borers (including Bronze birch and Alder) Japanese beetles (adult) Lace bugs Leafhoppers (including elm and viburnum leaf beetles) Leafhoppers (including glassy winged sharpshooter) Leafminers Mealybugs Pine tip morth larvae Psyllids Royal palm bugs Sawfly larvae' Soft scales Thrips (suppression) White grub larvae Whiteflies  O.1 to 0. 2 fl oz (3 to 6 ml) per foot of shrub height  Apply to individual plants using dosage indicated Apply a coil indicated Apply a coil indicated Amix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient water to indicated  Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient water to indicated  Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient water to indicated  Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient water to indicated  Mix required dosage in sufficient water to ind		USE RATE APPLICATION SITE		
Alder borer Aphids Armored scales (suppression) Asian longhorned beetle Black vine weevil larvae Bronze birch borer Emerald ash borer Eucalyptus longhorned borer Flatheaded borers (including Bronze birch and Alder) Japanese beetles (adult) Lace bugs Leaf beetles) (including glassy winged sharpshooter) Leafminers Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae' Soft scales Thrips (suppression) White grub larvae Whiteflies  (3 to 6 ml) per foot of shrub height  (3 to 6 ml) per foot of shrub height  Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone Keep the treated area moist for 7 to 10 days. DO NOT use less than 4 holes per shrub.  NEW YORK SPECIFIC RESTRICTION No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York  Soil Drench Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.  Basal Soil Drench Using Slow Release Irrigation Bags (such as Treegator® 15 20, or 50 Gallon capacity). Follow manufacturer's instructions for installation and setup of drip irrigation water bag. Fill bag to 1/4 capacity with irrigation water Add the specified rate of this product for the shrub height to which the bag is attached. Add remaining volume of water needed to fill bag  FLOWERS & GROUNDCOVERS  0.1 to 0. 2 fl oz (3 to 6 ml) per foot of	PEST	SHRUBS		
(including elm and viburnum leaf beetles)  Leafhoppers (including glassy winged sharpshooter)  Leafminers Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae* Soft scales Thrips (suppression) White grub larvae Whiteflies  Thus (suppression) White grub larvae Whiteflies  The pool of the tree directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.  Basal Soil Drench Using Slow Release Irrigation Bags (such as Treegator® 15 20, or 50 Gallon capacity). Follow manufacturer's instructions for installation and setup of drip irrigation water bag. Fill bag to 1/4 capacity with irrigation water. Add the specified rate of this product for the shrub height to which the bag is attached. Add remaining volume of water needed to fill bag  FLOWERS & GROUNDCOVERS  O.1 to 0. 2 fl oz (3 to 6 ml) per foot of  Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established Irrigate immediately following	Alder borer Aphids Armored scales (suppression) Asian longhorned beetle Black vine weevil larvae Bronze birch borer Emerald ash borer Eucalyptus longhorned borer Flatheaded borers (including Bronze birch and Alder) Japanese beetles (adult) Lace bugs	(3 to 6 ml) per foot of	Apply to individual plants using dosage indicated  Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone Keep the treated area moist for 7 to 10 days. DO NOT use less than 4 holes per shrub.  NEW YORK SPECIFIC RESTRICTION  No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York  Soil Drench	
Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae* Soft scales Thrips (suppression) White grub larvae Whiteflies  FLOWERS & GROUNDCOVERS  O.1 to 0. 2 fl oz (3 to 6 ml) per foot of  Mealybugs Irrigation Bags (such as Treegator® 15 20, or 50 Gallon capacity). Follow manufacturer's instructions for installation and setup of drip irrigation water bag. Fill bag to 1/4 capacity with irrigation water. Add the specified rate of this product for the shrub height to which the bag is attached. Add remaining volume of water needed to fill bag  Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established Irrigate immediately following	(including elm and viburnum leaf beetles) Leafhoppers (including glassy winged		10 gallons of water per 1,000 square feet as a drench around the base of the tree directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the	
FLOWERS & GROUNDCOVERS  0.1 to 0. 2 fl oz (3 to 6 ml) per foot of  FLOWERS & GROUNDCOVERS  Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established Irrigate immediately following	Mealybugs Pine tip moth larvae Psyllids Royal palm bugs Sawfly larvae* Soft scales Thrips (suppression) White grub larvae		Follow manufacturer's instructions for installation and setup of drip irrigation water bag. Fill bag to 1/4 capacity with irrigation water. Add the specified rate of this product for the shrub height to which the bag is attached. Add	
(3 to 6 ml) into the soil before planting or apply after plants per foot of are established Irrigate immediately following		FLO	WERS & GROUNDCOVERS	
		(3 to 6 ml) per foot of	Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established Irrigate immediately following application to established plants.	

#### **Remarks**

#### **RESTRICTION**

- **DO NOT** apply more than 25.6 fluid ounces (1.6 pints) (0.4 lbs Al) per acre per year.
- DO NOT use less than 2 gallons of spray volume per 1,000 square feet (85 GPA).

<sup>\*</sup>Sawfly larvae feed on mature foliage beginning in early spring Make treatments in the fall before sawfly emergence in spring to allow adequate time for imidacloprid translocation into mature foliage.

SOIL APPLICATIONS FIELD AND FOREST NURSERIES				
Pests	Fluid ounces /1000 ft of row	Fluid ounces / 1000 square ft		
For control of White grub larvae <sup>1</sup> (such as Japanese beetle, Masked chafers, European Chafer, Oriental beetle, Asiatic garden beetle)	1.7 fl oz (50 ml)	0.6 fl oz (17 ml) 25.6 fl oz / Acre		

#### **Application methods**

Apply as a uniform band on either side of the row using a band width six (6) inches wider than the actual root ball diameter to be dug

**DO NOT** allow bands in adjacent rows to overlap

#### **Remarks**

Mowing of the vegetation in the area to be treated to a height of 3 inches or less prior to application will improve the consistency of control

Apply May through July Time the treatment so that rainfall or irrigation occurs within 24 hours following the application

<sup>1</sup> For grub control in areas of turf apply as a broadcast application using 0.45 – 0.60 fluid ounces (13 - 17 ml) per 1,000 square feet (19.6 – 25.6 fluid ounces / Acre)

#### Restrictions

- **DO NOT** exceed 25.6 fluid ounces / acre per year (1.6 pints) (0.4 lbs Al/A)
- **DO NOT** use less than 2 gallons of spray volume per 1,000 square feet (85 GPA)

#### **EBB & FLOOD APPLICATIONS**

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

#### **EBB & FLOOD APPLICATIONS** ORNAMENTAL AND VEGETABLE PLANTS GROWN IN CONTAINERS Woody perennials, Herbaceous species Herbaceous species including includina Container vegetable plants **PEST** vegetable plants size (inches) (1 or 2 plants/pot) (3 or more/pot) ml /100 plants Adelgids 2 1.6 2.5 Aphids Armored scales (suppression) 3 2.5 3.7 Fungus gnats (larvae only)1 Japanese beetles (adults) 4 3.3 5.0 Lacebugs Leaf Beetles 5 4.2 6.3 (including Elm and Viburnum) Leafhoppers/Glassy winged Sharpshooters 6 5.0 7.7 Leafminers Mealybugs 7 5.9 9.1 Psylhds Root mealybugs<sup>2</sup> 8 6.6 10.0 Root weevil complex (such as Apopka Black vine 9 7.4 11.1 Citrus root)<sup>3</sup> Soft scales 12.5 10 8.3 Thrips (suppression)4 Whiteflies 11 9.0 14.3 White grub larvae (such as Japanese beetle Masked chafers European) 12 10.0 16.7

#### **Remarks**

#### **RESTRICTIONS:**

- For outdoor plants grown in ground applications of this product cannot exceed a total of 25.6 fluid ounces (1.6 pints) (0 4 lb of active ingredient) per acre per year
- Use only on the following vegetable plants intended for resale: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo and Tomato.

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

<sup>&</sup>lt;sup>2</sup>Root Mealybug control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate 1.7 fluid ounces (50 ml) in 150 gallons of water

<sup>&</sup>lt;sup>3</sup>Citrus Root Weevil For use on non bearing citrus nursery stock.

<sup>&</sup>lt;sup>4</sup>Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.

#### **DRENCH & IRRIGATION APPLICATIONS**

This product may be applied through Drench and Flood applications. See instructions above.

For Application Through Irrigation Systems: Apply only to greenhouse and nursery grown ornamentals vegetable plants (intended for resale only) and mtenorscape plants using soil drenches microirrigation drip irrigation overhead irrigation ebb and flood irrigation or hand held or motorized calibrated irrigation equipment.

DRENCH & IRRIGATION APPLICATIONS: ORNAMENTAL AND VEGETABLE PLANTS GROWN IN SMALL CONTAINERS, IN FLATS, ON BENCHES, OR IN BEDS			
	CONTAINERIZED PLANTS (small containers)		
PEST	Container size (inches)	Herbaceous species including vegetable plants (1 or 2 plants/pot)	Woody perennials, Herbaceous species including vegetable plants (3 or more/pot)
	# of Containers treated with 2.0 fluid ounces (60 n		
Adelgids	2	3000	2000
Aphids	3	2000	1350
Fungus gnats (larvae only) <sup>1</sup> Japanese beetles (adults)	4	1500	1000
Lacebugs	5	1200	800
Leaf Beetles	6	1000	650
(including Elm and Viburnum leaf beetles)	7	850	550
Leafhoppers	8	750	500
(including glassy winged sharpshooter)	9	675	450
Leafminers	10	600	400
Mealybugs	11	550	350
Psylhds Root mealybugs <sup>2</sup>	12	500	300
Root weevil complex	Application methods		
(such as Apopka Black vine Citrus root weevils) <sup>3</sup> Soft scales Thrips (suppression) <sup>4</sup>	Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Apply according to label directions Follow application with moderate irrigation Irrigate carefully during the next 10 days in order to prevent loss of active ingredient due to leaching		
Whitefloes White grub larvae	PLANTS IN FLATS, ON BENCHES, OR IN BEDS		
(such as Japanese beetle,	0.6 fluid ounces (17 ml) per 1,000 square feet		

planting or apply after plants are established Lightly water the treated areas if application is made to established plants Allow no leaching or runout for

(continued)

10 days after application.

**Application Methods** 

Mix required amount in sufficient water to uniformly cover the area being

treated **DO NOT** use less than 2 gallons of mixture per 1 000 square feet Apply as a broadcast treatment and incorporate into the medium before

Masked chafer, European

chafer, Oriental beetle,

Asiatic garden beetle)

## DRENCH & IRRIGATION APPLICATIONS: ORNAMENTAL AND VEGETABLE PLANTS GROWN IN SMALL CONTAINERS, IN FLATS, ON BENCHES, OR IN BEDS (cont.)

#### **Remarks**

- <sup>1</sup>Fungus gnat larvae in the soil will be controlled by drench or incorporation No adult Fungus Gnat control Other foliar insect control is achieved by the uptake of this product from a healthy root system translocating the active ingredient up into the plant
- <sup>2</sup> Root Mealybug control will require a thorough drenching of containerized media Coverage is essential for control while minimizing the amount of leachate Rate 1.7 fluid ounces (50 ml) in 150 gallons of water
- <sup>3</sup> Citrus Root Weevil For use on non bearing citrus nursery stock
- <sup>4</sup> Thrips suppression on foliage only Thnps in buds and flowers will not be suppressed

#### **RESTRICTIONS**

- For outdoor plants grown in ground applications of this product cannot exceed a total of 25.6 fluid ounces (1.6 pints) (0.4 lb of active ingredient) per acre per year
- Use only on the following vegetable plants intended for resale: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo and Tomato

## DRENCH AND IRRIGATION APPLICATIONS ORNAMENTAL AND VEGETABLE PLANTS GROWN IN LARGE CONTAINERS

**Application Instructions:** Use 1.7 fl. oz. (50 ml) of product in an appropriate amount of water to prevent leaching. 1.7 fl. oz. will treat the number of containers specified below based on container size.

Pests	Container Size (gallons)	# of Containers treated with 1.7 fluid ounces (50 ml)
Adelgids	1	340 - 244
Aphids Fungus gnats (larvae only) <sup>1</sup>	'	340 - 244
Japanese beetles (adults)		
Lacebugs	2	280-210
Leaf Beetles		
(including Elm and Viburnum leaf beetles) Leafhoppers	3	220-165
(including glassy winged sharpshooter)		
Leafminers	5	160-110
Mealybugs	3	100-110
Psylhds Root mealybugs <sup>2</sup>		
Root weevil complex	7	100-75
(such as Apopka Black vine		
Citrus root) <sup>3</sup> Soft scales	10	60-45
Thrips (suppression) <sup>4</sup>		
Whiteflies	15	40-30
White grub larvae	15	40-50
(such as Japanese beetle  Masked chafers European chafer Oriental		
beetle Asiatic garden beetle)	20	20-15

## DRENCH AND IRRIGATION APPLICATIONS ORNAMENTAL AND VEGETABLE PLANTS GROWN IN LARGE CONTAINERS (cont.)

#### **Application Method**

Apply in sufficient water to wet the potting medium. Make applications prior to egg hatch of the target pest. Irrigate moderately after application to move the active ingredient into the root zone.

#### **Remarks**

- <sup>1</sup>Fungus gnat larvae in the soil will be controlled by drench or incorporation No adult Fungus Gnat control Other foliar insect control is achieved by the uptake of this product from a healthy root system translocating the active ingredient up into the plant
- <sup>2</sup> Root Mealybug control will require a thorough drenching of containerized media Coverage is essential for control while minimizing the amount of leachate Rate 1.7 fluid ounces (50 ml) in 150 gallons of water
- <sup>3</sup> Citrus Root Weevil For use on non bearing citrus nursery stock
- <sup>4</sup> Thrips suppression on foliage only Thrps in buds and flowers will not be suppressed

#### **RESTRICTIONS**

- For outdoor plants grown in ground applications of this product cannot exceed a total of 25.6 fluid ounces (1.6 pints) (0.4 lb of active ingredient) per acre per year
- Use only on the following vegetable plants intended for resale: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo and Tomato

#### **CONDITIONS OF SALE AND WARRANTY**

The **DIRECTIONS FOR USE** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ALBAUGH, LLC, its Supplemental Distributors, or the Seller. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, All such risks shall be assumed by the Buyer**.

ALBAUGH, LLC, its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NEITHER ALBAUGH, LLC NOR ITS SUPPLEMENTAL DISTRIBUTORS MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. BUYER'S EXCLUSIVE REMEDY AND THE EXCLUSIVE LIABILITY OF ALBAUGH, LLC, ITS SUPPLEMENTAL DISTRIBUTORS AND THE SELLER FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, When Buyer suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories). Buyer must promptly notify Seller in writing of any claims to be eligible to receive either remedy stated above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL ALBAUGH, LLC, ITS SUPPLEMENTAL DISTRIBUTORS, OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALBAUGH, LLC, its Supplemental Distributors, and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of ALBAUGH, LLC

No employee or agent of ALBAUGH, LLC, its Supplemental Distributor, or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.