



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

91234-290

Date of Issuance:

9/11/23

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

A109.13

Name and Address of Registrant (include ZIP Code):

Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Continues page 2

Signature of Approving Official:

Kara Welch, Acting Product Manager 3
Invertebrate & Vertebrate Branch 3, Registration Division (7505T)

Date:

9/11/23

2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 91234-290.”
3. Submit one copy of the final printed label for the record before you release the product for shipment.
4. If, after formal consultation with the appropriate Service(s), additional modifications are identified in the Service’s Biological Opinion(s) for imidacloprid, EPA will notify Atticus, LLC in writing consistent with the terms in the Biological Opinion of any necessary required changes. Atticus, LLC must submit an application for amendment incorporating any required changes, including amended labels, consistent with the timeline specified in EPA’s notification. If Atticus, LLC fails to comply with this term, Atticus, LLC has agreed in prior written acceptance on August 22, 2023 of these terms that EPA may cancel the registration under an expedited process under FIFRA 6(e).

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

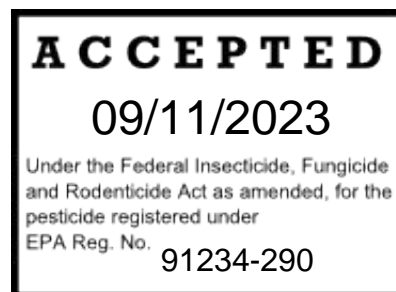
- Basic CSF dated 11/08/2021
- Alternate CSF 1 dated 11/08/2021
- Alternate CSF 2 dated 11/08/2021

If you have any questions, please contact Rebecca Lasko at 202-565-2469 or at lasko.rebecca@epa.gov.

Enclosure

Sublabel A

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}
{Note to reviewer: {Text} in braces denotes where in the final label text will appear}
{BOOKLET FRONT PANEL LANGUAGE}



CYFLUTHRIN	GROUP	3A	INSECTICIDE
IMIDACLOPRID	GROUP	4A	INSECTICIDE

A109.13^[TM]

[Alternate Brand Name: Turonyx L, Turonyx L GHN]

[For Broad-Spectrum Foliar and Systemic Insect Control on Ornamentals and Non-Bearing Fruit and Nut Trees, in Field, and Container Nurseries]
Not for use in Greenhouses

ACTIVE INGREDIENTS:	(% by weight)
Cyfluthrin	0.70%
Imidacloprid	2.94%
OTHER INGREDIENTS:	<u>96.36%</u>
TOTAL:	100.0%

0.262 Pounds ai imidacloprid/gallon 0.062 Pounds ai cyfluthrin/gallon
Cyfluthrin CAS # 68359-37-5; Imidacloprid CAS # 138267-41-3

**STOP-READ THIS ENTIRE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN**

CAUTION

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 label booklet for First Aid, Precautionary Statements and Directions for Use.

<p>[Contains cyfluthrin and imidacloprid, the active ingredient used in Discus® L. A109.13 is not manufactured, or distributed by OHP, Inc., seller of Discus® L.]</p>

{Note to reviewer: If applicable commercially, the contains statement and corresponding disclaimer will both appear within close proximity on the front panel of the final product packaging.}

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

{LANGUAGE INSIDE BOOKLET}

FIRST AID	
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

**For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if swallowed. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicator and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made out of any waterproof material: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

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

Engineering Controls Statement:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirement listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.607(d-f), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS
User Should: <ul style="list-style-type: none">• Remove clothing if pesticide gets inside. Then wash thoroughly and put on clean clothing.• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and 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 cleaning equipment or disposing of equipment wash waters.

This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.** Additional information may be obtained by consulting your Cooperation Extension Service.

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

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow coming in contact with oxidizing agent. Hazardous Chemical reaction may occur.

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.

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

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For best results read and follow all label directions.

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 CROPS FOR SPECIFIC POLLINATOR PROTECTION APPLICATION RESTRICTIONS. IF NONE EXIST UNDER THE SPECIFIC CROP, FOR OUTDOOR FOLIAR APPLICATIONS, FOLLOW THESE APPLICATION DIRECTIONS FOR CROPS THAT ARE COMMERCIALY GROWN ORNAMENTALS THAT ARE ATTRACTIVE TO POLLINATORS.



FOR FOOD/FEED CROPS AND COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry intervals. 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, soil injection or soil incorporation, 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, soils, or water, is:

- Coveralls
- Chemical resistant gloves made out of any waterproof material: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

Read and follow these directions, when using: Shake well before use

USE INFORMATION

A109.13 is a broad spectrum insecticide that provides effective insect control on field and container ornamental pests. When used at labeled rates and as directed under Directions for Use, **A109.13** will control designated pests on trees, shrubs, foliage plants, and flowers in field and container nurseries. Shake or agitate the concentrate before mixing, and add the appropriate amount of product when filling the spray tank with water.

APPLICATION: A109.13 mixes readily with water and may be used in all types of spray equipment. Mix product with the required amount of water and apply foliar treatments as a dilute spray application to the point of run-off. When spraying hard to wet foliage such as holly, pine or ivy, the addition of a surfactant may enhance both knock-down and residual activity. If concentrate or mist type spray equipment is used, use an equivalent amount of product on the area sprayed, as would be used in a dilute application

WHEN APPLIED TO SOIL: For use only on nursery ornamentals using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, or hand-held or motorized calibration irrigation equipment.

RESISTANCE MANAGEMENT

For resistance management, please note that **A109.13** contains both a Group 3A and Group 4A insecticides. Any insect population may contain individuals naturally resistant to **A109.13** and other Group 3A or Group 4A insecticides. The resistant individuals may dominate the insect population if these insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **A109.13** or other Group 3A or Group 4A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological, and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Atticus, LLC at 984-465-4800.

For resistance management purposes, a foliar application of any chloronicotinyl insecticide following a **A109.13** soil application in the same crop is not recommended.

COMPATIBILITY: A109.13 is compatible with all commonly used fungicides, miticides, liquid fertilizers, and other insecticides. Check physical compatibility using the correct proportion of products in a small jar if local experience is unavailable.

VEGETATIVE FILTER STRIPS

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing (name of pyrethroid) onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).
 - For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:
 - The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
 - Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
 - A functional terrace system is maintained on the area of application.
 - Water and sediment control basins for the area of application are functional and maintained.
 - The area of application is less than or equal to 10 acres.

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. <https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175>

BUFFER ZONE TO WATER BODIES

Ground Application:

- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

APPLICATION TO GRASSY AREAS IN NURSERIES

A109.13 can be used for the control of soil inhabiting pests of grassy areas of nurseries, including: Northern and Southern masked chafers, *Cyclocephala borealis*, *C. immaculata*, and/or *C. lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotrogus majalis*; Green June beetle, *Cotinis nitida*; May or June beetle, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis*; Billbugs, *Sphenophorus* spp.; Black turfgrass atanius, *Atanius spretulus*; *Aphodius* spp.; and mole crickets, *Scapteriscus* spp. **A109.13** can also be used for suppression of cutworms. Use **A109.13** as directed in nursery grass in the following sites: under or around field or container grown plants, on roadways or other grassy areas in or around nurseries.

The active ingredient in **A109.13** has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. Optimal control can be achieved when applications are made preceding or during the egg laying period. 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. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by

sufficient irrigation or rainfall to move the active ingredient through the thatch.

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.

Restrictions:

- Do not use **A109.13** on commercial sod farms.
- Do not apply **A109.13** to soils which are water logged or saturated.
- Do not exceed a total of 244 oz (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Not for use in greenhouses.

APPLICATION EQUIPMENT FOR USE ON GRASSY AREAS IN NURSERIES: Apply **A109.13** in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

APPLICATION THROUGH IRRIGATION SYSTEMS

Apply **A109.13** at the rates on this label either alone or in tank mixture with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1 :1 Oto 1 :200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours. 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.

Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system.

Apply **A109.13** only through micro irrigation (individual spaghetti tube), drip irrigation, overhead irrigation, ebb and flood, or hand-held or motorized calibrated irrigation equipment.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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

Restrictions:

- Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from nonuniform distribution of treated water.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

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

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge water

from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

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

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

DIRECTIONS FOR FOLIAR APPLICATION TO GRASSY AREAS OF NURSERIES			
SITE	PEST	DOSAGE	INSTRUCTIONS
Grassy areas of Field & Forest Nurseries	Ants Armyworms Billbugs Crickets Earwigs Grasshoppers Hyperodes weevil Japanese beetle (adult) Mole crickets Sod webworms Ticks (including deer ticks) Weevils	3.4 – 5.6 fl oz per 1,000 sq ft or 1.14 – 1.91 gallon/ acre or 0.37 – 0.62 lb AI/A	Use the lower labeled rate for light infestation or for insects easier to control, and the higher labeled rate within the rate range for heavy infestations or insects more difficult to control. Set spray equipment to dispense a coarse, large droplet. Be sure to use plenty of water to apply product evenly over soil or turf. Do not wet the foliage within one hour after applying. To avoid serious damage to plants, treat pests early in the season before they multiply. Mow grass after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.
	White Grub larvae (such as: Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	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. Use 13.5 fl oz (415 ml) to 17 fl oz (502 ml) per 3,000 sq ft or For grub control in areas of turf, apply as a broadcast application Use 13.5 fl oz (415 ml) to 17 fl oz (502 ml) per 3,000 sq ft	Mow vegetation in the area to be treated to a height of 3 inches or less prior to application. Mowing to the lowest possible height will ensure greater consistency of control. Apply May through mid-August. For optimum control, treatment must be followed by rainfall or irrigation. Do not use less than 2 gallons of spray volume per 1,000 square feet. Mow grass after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.

RESTRICTIONS:

- Do not apply more than 244 oz (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not allow this product to contact plants in bloom while bees are foraging the treatment area.
- Do not graze treated areas or use clippings for treated areas for feed or forage.
- Avoid runoff or puddling of irrigation water following application.
- Do not apply **A109.13** to soils which are water logged or saturated, which will not allow penetration into the root zone of the plants.

DIRECTIONS FOR FOLIAR APPLICATIONS TO ORNAMENTALS GROWN IN NURSERIES

For foliar insect control in and around field grown nurseries and container stocks, and outdoor ornamentals and ornamentals grown in flats, benches, or beds.

CROP	PEST	DOSAGE	INSTRUCTIONS
Shrubs Evergreens Flowers Foliage Plants Groundcovers Trees – Non-bearing Fruit and Nut Trees (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.)	Adelgids Aphids Japanese beetles (adult) Lace bugs Leaf-feeding Beetles (including elm and viburnum leaf beetles) Leafhoppers (including Glassy Winged Sharpshooter) Leafminers Mealybugs Pine Tip moths Psyllids Rose Midges Rose Slugs Sawfly larvae Scale insects (crawler stages) Thrips (Supression) Weevil Complex (including Strawberry Root weevil) Whiteflies	25 fl. oz/100 gallons of water. (1/4 fl oz per gallon of water)	Foliar applications: Start treatments prior to establishment of high pest population and reapply on an as needed basis. Apply when pests first appear or when damage is first noticed. Spray thoroughly. Reapply at 14- 28 days, if needed. The addition of a spreader sticker may enhance effect. Phytotoxicity has not been a problem with A109.13 . If information concerning specific cultivars under local environmental conditions is not available, then it is advised to pre-spray a selection of plants and observe them for phytotoxicity for a minimum of seven days before making widespread applications.
	Ants Armyworms Azalea caterpillars Bagworms Boxelder bugs California oakworms Cankerworms Cutworms Clover mites Elm leaf beetles Elm spanworms	50 fl. oz/100 gallons of water. (1/2 fl oz per gallon of water)	Make applications to flowering plants during times when pollinating insects are not present, such as early morning or late evening.

	Fungus gnats (adults) Grasshoppers Gypsy moth larvae Leaf-feeding Caterpillars Oleander moth larvae Pillbugs Pine Shoot moths Plant bugs Redhumped caterpillars Spittle bugs Striped oakworms Tent Caterpillars Tussock moth larvae Walnut caterpillars Webworms Yellownecked caterpillars	
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RESTRICTIONS FOR OUTDOOR USE:

- **Follow application restrictions FOR COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page [x] to protect bees and other insect pollinators.**
- Do not apply more than 244 oz (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

DIRECTIONS FOR SOIL DRENCH AND SOIL INJECTION FOR TREES AND SHRUBS FOR NURSERY

For systemic and contact/ingestion insect control in and around field grown nurseries, outdoor ornamentals, and ornamentals grown in flats, benches, or beds.

PESTS	CROP	DOSAGE	INSTRUCTIONS
Adelgids Aphids Armored Scale (suppression) Borers ¹ : Eucalyptus longhorned borers Flatheaded borers (including bronze birch and alder borers) Fungus Gnats (larvae only ²) Japanese beetles (adults) Lace bugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassywinged sharpshooter) Leafminers Mealybugs	Shrubs Evergreens Flowers Foliage plants Ground covers Ornamental Trees Non-bearing Fruit and Nut Trees (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.)	3.4 to 5.6 fl oz/1,000 ft ² or 1.14 to 1.91 gal/A	Flats: Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Use the higher labeled rate within the rate range for borer control and with high pest populations.
	Trees (including non-bearing fruit and nut trees) and Shrubs	0.75 to 1.5 fl oz (22 – 44 ml) per inch of trunk diameter breast height (D.B.H.) or per foot of shrub height (F.S.H.)	Soil Injection: Apply with evenly spaced injection holes around the base of the plant. Mix required dosage in

Pine Tip moth larvae Psyllids Root mealybugs Root weevil complex (such as Apopka weevil, black vine weevil, Citrus root weevil ³) Royal palm bugs Rose midge Sawfly larvae Soft Scale Thrips (suppression ⁴) Whiteflies			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. For optimum control, keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per plant (tree/shrub). No soil injection Applications allowed in Nassau or Suffolk Counties of New York. Soil Drench: Uniformly apply the dosage in a minimum of 10 gallons of water per 1,000 sq. Ft. as a drench around the base of plants, directed at the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.
	GROUND TREATMENT PRE-PLANTING FOR FLOWERS AND GROUNDCOVERS	3.4 to 5.6 fl oz /1,000 ft ² or 1.14 to 1.91 gal/A	Apply as a broadcast treatment and incorporate into the soil before planting.

RESTRICTION FOR OUTDOOR USES:

- Applications of **A109.13** cannot exceed a total of 244 oz (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

¹**Borers:** for control of specified borer. Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

² **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 **A109.13** from a healthy root system translocating the active ingredient up into the plant.

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

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

DIRECTIONS FOR DRENCH AND IRRIGATION APPLICATIONS TO NURSERY ORNAMENTAL PLANTS

PEST	USE PATTERN	DOSAGE		INSTRUCTIONS
Adelgids Aphids Armored Scale (suppression) Borers: ¹ Eucalyptus longhorned borers Flathead borers (including bronze birch and alder borers) Fungus Gnats (larvae only ²) Japanese Beetle (adult) Lacebugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy winged sharpshooter) Leafminers Mealybugs Pine Tip moth larvae Psyllids Root Mealybugs ³ Root Weevil Complex (such as: Apopka Weevil, Black Vine Weevil, Citrus Root Weevil ⁴) Soft Scale Thrips (suppression) ⁵ Whiteflies	Containerized plants	Container size 1 gallon 2 gallon 3 gallon 5 gallon 7 gallon 10 gallon 15 gallon 20 gallon	No. pots treated with 13 fl oz (385 ml) 340 to 244 280 to 210 220 to 165 160 to 110 100 to 75 60 to 45 40 to 30 20 to 15	Use 13 fl oz (385 ml) of product in an appropriate amount of water to avoid leaching to treat the number of pots based on pot size in the table below. Apply in sufficient water to wet the potting medium. For optimum control, make applications prior to egg hatch of the target pest. Irrigate moderately for about 10 days after application allowing the active ingredient to move into the plant. Do not allow leaching at this time. For trees and shrubs in containers greater than 20 gallons, use the labeled rates per inch of trunk diameter or foot of shrub height.

White Grub larvae

(such as:

Japanese Beetle,
Masked Chafers,
European Chafer,
Oriental Beetle,
Asiatic Garden Beetle)



RESTRICTIONS:

- Do not allow leachate runoff for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient.
- Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants
- On plants with a production cycle of less than one year, application is not to exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.

For Outdoor Uses:

- Follow application restrictions **FOR COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page [x] to protect bees and other insect pollinators.**
- Do not apply more than 244 fl oz of **A109.13** (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

¹ **Borers:** Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

² **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 **A109.13** through root system by translocating the active ingredient up into the plant.

³ **Root Mealybug** control will require a thorough drench of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 13 fl oz/150 gallons of water.

⁴ **Citrus Root Weevil:** For use on non-bearing citrus nursery stock.

⁵ **Thrips** suppression on foliage only. Thrips in buds and flowers will not be suppressed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[For plastic containers ≤ 5 gallons: Nonrefillable Container: Do not reuse or refill this container. 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: Nonrefillable container: Do not reuse or refill this container. Triple 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 ¼ full with water. Recap 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[A109.13] is a trademark of Atticus, LLC

[Discus®] is a registered trademark of OHP, Inc.

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

CYFLUTHRIN	GROUP	3A	INSECTICIDE
IMIDACLOPRID	GROUP	4A	INSECTICIDE

A109.05TM

[Alternate Brand Name: Turonyx L, Turonyx L GHN]

[For Broad-Spectrum Foliar and Systemic Insect Control on Ornamentals and Non-Bearing Fruit and Nut Trees, in Field, and Container Nurseries]

[Not for use in Greenhouses]

ACTIVE INGREDIENTS:	(% by weight)
Cyfluthrin.....	0.7%
Imidacloprid.....	2.94%
OTHER INGREDIENTS:	96.36%
TOTAL:	100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 – 20 minutes. • Call a poison control center or doctor for treatment advice.
Note to Physician: No specific antidote is available. Treat the patient symptomatically.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

CAUTION: Causes moderate eye irritation. Harmful if swallowed. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and other aquatic organisms. 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 cleaning equipment or disposing of equipment wash waters.

This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.** Additional information may be obtained by consulting your Cooperation Extension Service.

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

PHYSICAL OR CHEMICAL HAZARDS: Do not mix or allow coming in contact with oxidizing agent. Hazardous Chemical reaction may occur.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[For plastic containers ≤ 5 gallons: Nonrefillable Container: Do not reuse or refill this container. 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: Nonrefillable container: Do not reuse or refill this container. Triple 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 ¼ full with water. Recap 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

[Contains cyfluthrin and imidacloprid, the active ingredient used in Discus® L. **A109.13** is not manufactured, or distributed by OHP, Inc., seller of Discus® L.]

{Note to reviewer: If applicable commercially, the contains statement and corresponding disclaimer will both appear within close proximity on the base label of the final product packaging.}

Manufactured for:
Atticus, LLC
 940 NW Cary Parkway, Suite 200
 Cary, NC 27513

EPA Reg. No.: 91234-XX
EPA Est. No.: _____
NET CONTENTS: _____

Sublabel B

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}

{Note to reviewer: {Text} in braces denotes where in the final label text will appear}

{BOOKLET FRONT PANEL LANGUAGE}

CYFLUTHRIN	GROUP	3A	INSECTICIDE
IMIDACLOPRID	GROUP	4A	INSECTICIDE

A109.13^[TM]

[Alternate Brand Name: Turonyx L, Turonyx L GHN]

[For Broad-Spectrum Foliar and Systemic Insect Control on Ornamentals and Non-Bearing Fruit and Nut Trees in Greenhouses and Nurseries]

ACTIVE INGREDIENTS:	(% by weight)
Cyfluthrin	0.70%
Imidacloprid	2.94%
OTHER INGREDIENTS:	<u>96.36%</u>
TOTAL:	100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

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 label booklet for First Aid, Precautionary Statements and Directions for Use.

[Contains cyfluthrin and imidacloprid, the active ingredient used in Discus® L.
A109.13 is not manufactured, or distributed by OHP, Inc., seller of Discus® L.]

{Note to reviewer: If applicable commercially, the contains statement and corresponding disclaimer will both appear within close proximity on the front panel of the final product packaging.}

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

{LANGUAGE INSIDE BOOKLET}

FIRST AID	
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.• Call a poison control center or doctor for further treatment advice.
If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
Note to Physician: No specific antidote is available. Treat the patient symptomatically.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if swallowed. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Applicator and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material: barrier laminate, butyl rubber, nitrile rubber, neoprene, natural rubber, polyethylene, polyvinylchloride (PVC), or viton
- Shoes plus socks

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

Engineering Controls Statement:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirement 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:

- Remove clothing if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and 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 cleaning equipment or disposing of equipment wash waters.

This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.** Additional information may be obtained by consulting your Cooperation Extension Service.

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

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow coming in contact with oxidizing agent. Hazardous Chemical reaction may occur.

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.

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

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For best results read and follow all label directions.

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 CROPS FOR SPECIFIC POLLINATOR PROTECTION APPLICATION RESTRICTIONS. IF NONE EXIST UNDER THE SPECIFIC CROP, FOR OUTDOOR FOLIAR APPLICATIONS, FOLLOW THESE APPLICATION DIRECTIONS FOR CROPS THAT ARE COMMERCIALY GROWN ORNAMENTALS THAT ARE ATTRACTIVE TO POLLINATORS.



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

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry intervals. 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, soil injection or soil incorporation, 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, soils, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material: barrier laminate, butyl rubber, nitrile rubber, neoprene, natural rubber, polyethylene, polyvinylchloride (PVC), or viton
- Shoes plus socks

**Read and follow these directions, when using:
Shake well before use**

USE INFORMATION

When used at labeled rates and as directed under Directions for Use, **A109.13** will control designated pests on non-bearing fruit and nut trees (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.), shrubs, foliage plants and flowers in greenhouses and field and container nurseries. Shake or agitate the concentrate before mixing, and add the appropriate amount of product when filling the spray tank with water.

APPLICATION:

A109.13 Insecticide 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 – soil injection, drenches, chemigation* 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. For this reason, make applications prior to anticipated pest infestation to achieve optimum levels of control. For outdoor ornamentals, broadcast applications cannot exceed a total of 224 fl oz (0.62 lb of active ingredient) per acre per calendar year. **BARK MEDIA:** Media with 30% or more bark content may confer a shorter period of protection when treated with **A109.13**.

*When applied to soil: For use only on nursery ornamentals using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, or hand-held or motorized calibration irrigation equipment.

RESISTANCE MANAGEMENT

For resistance management, please note that **A109.13** contains both a Group 3A and Group 4A insecticides. Any insect population may contain individuals naturally resistant to **A109.13** and other Group 3A or Group 4A insecticides. The resistant individuals may dominate the insect population if these insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **A109.13** or other Group 3A or Group 4A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological, and other chemical control practices.

- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Atticus, LLC at 984-465-4800.

Application Equipment for Ornamentals

A109.13 mixes readily with water and may be used in many types of application equipment. Mix product with the required amount of water and apply as desired dependent upon the selected use pattern.

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

A109.13 has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and compatibility using the correct proportion of products in a small jar test if local experience is unavailable.

APPLICATION THROUGH IRRIGATION SYSTEMS

A109.13 is to be applied at rates prescribed on the label either alone or in tank mixtures with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:100 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours.

Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system.

Apply **A109.13** only through micro irrigation (individual spaghetti tubes), drip irrigation, overhead irrigation, ebb, flood or hand-held or motorized calibrated irrigation equipment.

Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.

If you have any questions about calibration, contact your State Extension Service specialist, equipment manufacturers or other experts in this area.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments when the need arises.

SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

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

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge water from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve

located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

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

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

COMPATIBILITY: A109.13 is compatible with all commonly used fungicides, miticides, liquid fertilizers and other insecticides. Check physical compatibility using the correct proportion of products in a small jar if local experience is unavailable. 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.

APPLICATION TO GRASSY AREAS IN NURSERIES

A109.13 can be used for the control of soil-inhabiting pests of grassy areas of nurseries, including: Northern and Southern masked chafers, *Cyclocephala borealis*, *C. immaculata*, and/or *C. lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotrogus majalis*; Green June beetle, *Cotinis nitida*; May or June beetle, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis*; Billbugs, *Sphenophorus* spp.; Black turfgrass ateniens, *Ataenius spretulus*; *Aphodius* spp. and mole crickets, *Scapteriscus* spp. **A109.13** can be used as directed on nursery grass in sites under or around field or container grown plants, on roadways or other grassy areas in or around nurseries. **A109.13** cannot be used on commercial sod farms.

The active ingredient in **A109.13** has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. 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. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by sufficient irrigation

or rainfall to move the active ingredient through the thatch.

Do not apply **A109.13** to soils which are water logged or saturated. 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. Do not apply more than 244 fl oz of **A109.13** (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.

Application Equipment for Use on Grassy Areas in Nurseries: Apply **A109.13** in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

DIRECTIONS FOR FOLIAR APPLICATION TO GRASSY AREAS OF NURSERIES			
SITE	PEST	DOSAGE	INSTRUCTIONS
Grassy areas of Field & Forest Nurseries	Ants	3.4 – 5.6 fl oz per 1,000 sq ft	Use the low labeled rate for light infestation or for insects easier to control, and the higher labeled rate within the rate range for heavy infestations or insects more difficult to control. Set spray equipment to dispense a coarse, large droplet. Be sure to use plenty of water to apply product evenly over soil or turf. Do not wet the foliage within one hour after applying. To avoid serious damage to plants, treat for pests early in the season before they multiply. Mow grass after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.
	Armyworms		
	Billbugs	1.14 – 1.91 gallon/ acre	
	Crickets		
	Cutworms	0.37 – 0.62 lb AI/A	
	Earwigs		
	Grasshoppers		
	Hyperodes weevil (adult)		
	Japanese beetle (adult)		
	Mole crickets		
	Sod webworms		
	Ticks (including deer ticks)		
	Weevils		

	<p>White Grub larvae (such as: Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)</p>	<p>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.</p> <p>Use 14 fl oz (415 ml) to 17 fl oz (502 ml) per 3,000 sq ft</p> <p>or</p> <p>For grub control in areas of turf, apply as a broadcast application</p> <p>Use 14 fl oz (415 ml) to 17 fl oz (502 ml) per 3,000 sq ft</p>	<p>Mow vegetation in the area to be treated to a height of 3 inches or less prior to application. Mowing to the lowest possible height will insure greater consistency of control.</p> <p>Apply May through mid-August. For optimum control, treatment must be followed by rainfall or irrigation. Do not use less than 2 gallons of spray volume per 1,000 square feet.</p> <p>Mow grass after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.</p>
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RESTRICTIONS:

- Do not apply more than 244 fl oz of **A109.13** (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not allow this product to contact plants in bloom while bees are foraging the treatment area.
- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Avoid runoff or puddling of irrigation water following application.
- Do not apply **A109.13** to soils which are water logged or saturated, which will not allow penetration into the root zone of the plants.

DIRECTIONS FOR FOLIAR APPLICATIONS TO ORNAMENTALS GROWN IN NURSERIES AND GREENHOUSES

For foliar insect control in and around field-grown nurseries and container stocks, and outdoor ornamentals and ornamentals grown in flats, benches, or beds.

CROP	PEST	DOSAGE	INSTRUCTIONS
<p>Shrubs</p> <p>Evergreens</p> <p>Flowers</p> <p>Foliage Plants</p> <p>Groundcovers</p> <p>Trees – Non-bearing Fruit and Nut Trees (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.)</p>	<p>Adelgids</p> <p>Aphids</p> <p>Japanese beetles (adult)</p> <p>Lace bugs</p> <p>Leaf-feeding Beetles (including elm and viburnum leaf beetles)</p> <p>Leafhoppers (including Glassy Winged Sharpshooter)</p> <p>Leafminers</p> <p>Mealybugs</p> <p>Pine Tip moths</p> <p>Psyllids</p> <p>Rose Midges</p> <p>Rose Slugs</p> <p>Sawfly larvae</p> <p>Scale insects (crawler stages)</p> <p>Thrips (Supression)</p> <p>Weevil Complex (including Strawberry Root weevil)</p> <p>Whiteflies</p>	<p>25 fl. oz/100 gallons of water.</p> <p>(1/4 fl oz per gallon of water)</p>	<p>Foliar applications: Start treatments prior to establishment of high pest population and reapply on an as needed basis.</p> <p>Apply when pests first appear or when damage is first noticed. Spray thoroughly. Reapply at 14- 28 day intervals, if needed. The addition of a spreader-sticker may enhance effect.</p> <p>Phytotoxicity has not been a problem with A109.13. If information concerning specific cultivars under local environmental conditions is not available, then it is advised to pre-spray a selection of plants and observe them for phytotoxicity for a minimum of seven days before making widespread applications.</p> <p>Make applications to flowering plants during times when pollinating insects are not present, such as early morning or late evening.</p>
	<p>Ants</p> <p>Armyworms</p> <p>Azalea caterpillars</p> <p>Bagworms</p> <p>Boxelder bugs</p> <p>California oakworms</p> <p>Cankerworms</p> <p>Cutworms</p> <p>Clover mites</p> <p>Elm leaf beetles</p> <p>Elm spanworms</p> <p>Fungus gnats (adults)</p> <p>Grasshoppers</p> <p>Gypsy moth larvae</p> <p>Leaf-feeding Caterpillars</p> <p>Oleander moth larvae</p> <p>Pillbugs</p> <p>Pine Shoot moths</p> <p>Plant bugs</p> <p>Redhumped caterpillars</p>	<p>50 fl. oz/100 gallons of water.</p> <p>(1/2 fl oz per gallon of water)</p>	

	Spittle bugs Striped oakworms Tent Caterpillars Tussock moth larvae Walnut caterpillars Webworms Yellownecked caterpillars	
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RESTRICTIONS FOR OUTDOOR USE:

- **Follow application restrictions FOR COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page [x] to protect bees and other insect pollinators.**
- Do not apply more than 244 oz (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not apply this product, by any application method, to linden, basswood, or other *Tilia* species.

DIRECTIONS FOR SOIL DRENCH AND SOIL INJECTION FOR ORNAMENTAL TREES, NON-BEARING FRUIT AND NUT TREES, AND SHRUBS GROWN IN NURSERIES AND GREENHOUSES

For systemic and contact/ingestion insect control in and around field grown nurseries, outdoor containerized ornamentals, ornamentals grown in greenhouses, and ornamentals grown in flats, benches, or beds.

PESTS	CROP	DOSAGE	INSTRUCTIONS
Adelgids Aphids Armored Scale (suppression) Borers ¹ : Eucalyptus longhorned borers Flatheaded borers (including bronze birch and alder borers) Fungus Gnats (larvae only ²) Japanese beetles (adults) Lace bugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassywinged sharpshooter) Leafminers Mealybugs Pine Tip moth larvae Psyllids Root mealybugs Root weevil complex (such as Apopka weevil, black vine weevil, Citrus root weevil ³) Royal palm bugs Rose midge Sawfly larvae	Shrubs Evergreens Flowers Foliage plants Ground covers Ornamental Trees Non-bearing Fruit and Nut Trees (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.)	3.4 to 5.6 fl oz/1,000 ft ² or 1.14 to 1.91 gal/A	Flats: Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Use higher labeled rate within the rate range for borer control and with high pest populations.
	Ornamental Trees Non-bearing Fruit and Nut Trees Shrubs	0.75 to 1.5 fl oz (22 – 44 ml) per inch of trunk diameter breast height (D.B.H.) or per foot of shrub height (F.S.H.)	Soil Injection: Apply with evenly spaced injection holes around the base of the plant. 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. For optimum control, keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per plant (tree/shrub).

Soft Scale Thrips (suppression ⁴) Whiteflies			<p>No soil injection Applications allowed in Nassau or Suffolk Counties of New York.</p> <p>Soil Drench: Uniformly apply the dosage in a minimum of 10 gallons of water per 1,000 sq. Ft. as a drench around the base of plants, directed at the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.</p>
	GROUND TREATMENT PRE-PLANTING FOR FLOWERS AND GROUNDCOVERS	3.4 to 5.6 fl oz /1,000 ft ² or 1.14 to 1.91 gal/A	Apply as a broadcast treatment and incorporate into the soil before planting.
<p>RESTRICTION FOR OUTDOOR USES:</p> <ul style="list-style-type: none"> • Do not apply more than 244 fl oz of A109.13 (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year. • Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants • Do not apply this product, by any application method, to linden, basswood, or other <i>Tilia</i> species. 			
<p>¹Borers: for control of specified borer. Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.</p> <p>² 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 A109.13 from a healthy root system translocating the active ingredient up into the plant.</p> <p>³ Citrus Root Weevil: For use on non-bearing citrus nursery stock.</p> <p>⁴Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.</p>			

DIRECTIONS FOR DRENCH AND IRRIGATION APPLICATIONS

For use only on greenhouse and nursery ornamentals using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, ebb and flood irrigation, or hand-held or motorized calibrated irrigation equipment.

PEST	USE PATTERN		A109.13 DOSE		INSTRUCTIONS
	Plants in Containers	Herbaceous Species –	Container size (inches)	No. pots treated with 14 fl oz (415 ml)	
Adelgids	Plants in Containers	Herbaceous Species –	2	3,000	Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Apply according to label directions. Follow application with moderate irrigation. Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching.
Aphids			3	2,000	
Fungus Gnats ¹ (larvae only)			4	1,500	
Japanese Beetles (adults)			5	1,200	
Lacebugs			6	1,000	
Leaf beetles (including elm and viburnum leaf beetles)			7	850	
Leafhoppers (including glassy-winged sharpshooter)			8	750	
Leafminers			9	675	
Mealybugs			10	600	
Psyllids			11	550	
Root mealybugs ²			12	500	
Root Weevil Complex (Such as Apopka Weevil, Black Vine Weevil, Citrus Root Weevil) ³			Woody Perennials	2	
Soft Scale	3	1,350			
Thrips (suppression) ⁴	4	1,000			
Whiteflies	5	800			
White Grub larvae (such as Japanese Beetle, Masked Chafer, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	6	650			
	7	550			
	8	500			
	9	450			
	10	400			
	11	350			
	12	300			
	Herbaceous Species	Use the above woody perennial rates			
	Ornamental plants grown in flats, benches, or beds	14 fl oz (415 ml) per 3,000 sq ft			

RESTRICTIONS:

- Do not allow leachate runoff for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient.
- Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants
- On plants with a production cycle of less than one year, application is not to exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.

For Outdoor Uses:

- Follow application restrictions **FOR COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page [x] to protect bees and other insect pollinators.**
- Do not apply more than 244 fl oz of **A109.13** (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not apply this product, by any application method, to linden, basswood, or other *Tilia* species.

¹ **Fungus gnat larvae** in the soil will be controlled by drench or incorporation. No adult Fungus Gnat control. Other foliar insect control is achieved by the uptake of **A109.13** from a healthy root system translocating the active ingredient up into the plant.

² **Root Mealybug** control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 14 fl oz (415 ml) in 150 gallons of water.

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

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

DIRECTIONS FOR DRENCH AND IRRIGATION APPLICATIONS TO NURSERY ORNAMENTAL CONTAINERIZED PLANTS				
Pest	Use Pattern	Dosage		INSTRUCTIONS
Adelgids Aphids Armored Scale (suppression) Borers: ¹ Eucalyptus longhorned borers Flathead borers (including bronze birch and alder borers) Fungus Gnats (larvae only ²) Japanese Beetle (adult) Lacebugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy winged sharpshooter) Leafminers Mealybugs Pine Tip moth larvae Psyllids Root Mealybugs ³ Root Weevil Complex (such as: Apopka Weevil, Black Vine Weevil, Citrus Root Weevil ⁴) Soft Scale Thrips (suppression) ⁵ Whiteflies White Grub larvae (such as: Japanese Beetle, Masked Chafer, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	Containerized plants	Container Size	No. pots treated with 14 fl oz (415 ml)	Use 14 fl oz (415 ml) of product in an appropriate amount of water to avoid leaching to treat the number of pots based on pot size in the table below. Apply in sufficient water to wet the potting medium. For optimum control, make applications prior to egg hatch of the target pest. Irrigate moderately for about 10 days after application allowing the active ingredient to move into the plant. Do not allow leaching at this time. For trees and shrubs in containers greater than 20 gallons, use the rates per inch of trunk diameter or foot of shrub height.
		1 gallon	340 to 244	
		2 gallon	280 to 210	
		3 gallon	220 to 165	
		5 gallon	160 to 110	
		7 gallon	100 to 75	
		10 gallon	60 to 45	
		15 gallon	40 to 30	
		20 gallon	20 to 15	

RESTRICTIONS FOR OUTDOOR ORNAMENTALS:

- **Follow application restrictions FOR COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page [x] to protect bees and other insect pollinators.**
- Do not apply more than 244 fl oz of **A109.13** (0.5 lb of Imidacloprid + 0.12 lbs of Cyfluthrin) per acre per calendar year.
- Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants
- On plants with a production cycle of less than one year, application is not to exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.
- Do not apply this product, by any application method, to linden, basswood, or other *Tilia* species.

¹ **Borers:** Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

² **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 **A109.13** through root system by translocating the active ingredient up into the plant.

³ **Root Mealybug** control will require a thorough drench of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 14 fl oz/150 gallons of water.

⁴ **Citrus Root Weevil:** For use on non-bearing citrus nursery stock.

⁵ **Thrips** suppression on foliage only. Thrips in buds and flowers will not be suppressed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[For plastic containers ≤ 5 gallons: Nonrefillable Container: Do not reuse or refill this container. 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: Nonrefillable container: Do not reuse or refill this container. Triple 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 ¼ full with water. Recap 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[A109.13] is a trademark of Atticus, LLC

[Discus®] is a registered trademark of OHP, Inc.

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

CYFLUTHRIN	GROUP	3A	INSECTICIDE
IMIDACLOPRID	GROUP	4A	INSECTICIDE

A109.05^[TM]

[Alternate Brand Name: Turonyx L, Turonyx L GHN]

[For Broad-Spectrum Foliar and Systemic Insect Control on Ornamentals and Non-Bearing Fruit and Nut Trees in Greenhouses and Nurseries]

ACTIVE INGREDIENTS:	(% by weight)
Cyfluthrin.....	0.7%
Imidacloprid.....	2.94%
OTHER INGREDIENTS:	96.36%
TOTAL:	100.0%

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
Note to Physician: No specific antidote is available. Treat the patient symptomatically.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if swallowed. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to fish and 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 cleaning equipment or disposing of equipment wash waters. This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.** Additional information may be obtained by consulting your Cooperation Extension Service. Imidacloprid demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. **PHYSICAL OR CHEMICAL HAZARDS:** Do not mix or allow coming in contact with oxidizing agent. Hazardous Chemical reaction may occur.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.
PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.
PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
CONTAINER HANDLING:
[For plastic containers ≤ 5 gallons: Nonrefillable Container: Do not reuse or refill this container. 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]
[For plastic containers > 5 gallons: Nonrefillable container: Do not reuse or refill this container. Triple 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 ¼ full with water. Recap 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

See inside label booklet for additional Precautionary Statements and Directions for Use.

[Contains cyfluthrin and imidacloprid, the active ingredient used in Discus® L. **A109.13** is not manufactured, or distributed by OHP, Inc., seller of Discus® L.]

{Note to reviewer: If applicable commercially, the contains statement and corresponding disclaimer will both appear within close proximity on the base label of the final product packaging.}

Manufactured for:
Atticus, LLC
 940 NW Cary Parkway, Suite 200
 Cary, NC 27513

EPA Reg. No.: 91234-XX
EPA Est. No.: _
NET CONTENTS: _____