



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

April 2, 2019

Arianna Shorey  
Regulatory Consultant for  
Ensystex III, Inc.  
c/o Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St. Ct. NW  
Gig Harbor, WA 98332

Subject: Label Amendment – updating the WSP mixing and loading language  
Product Name: Turfthor WP  
EPA Registration Number: 82957-3  
Application Date: 9/29/17  
Decision Number: 537697

Dear Ms. Shorey:

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

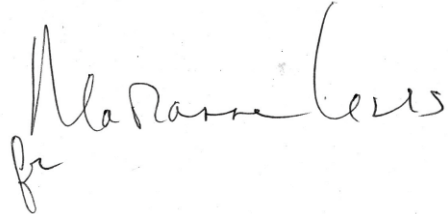
A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. This label approval is contingent on the sublabels being use separately as presented. You must submit one copy of the final printed labeling before you release the product for shipment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

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

Page 2 of 2  
EPA Reg. No. 82957-3  
Decision No. 537697

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Marianne Lewis by phone at (703) 308-8043 or via email at [lewis.marianne@epa.gov](mailto:lewis.marianne@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Marianne Lewis" with a small "for" written below the name.

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

Enclosure



**ACCEPTED**  
04/02/2019  
Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 82957-3

# TURFTHOR WSP

For foliar and systemic control of listed insect pests of turfgrass, landscape ornamentals, shrubs and trees in lawns, golf courses\*, landscapes, playgrounds, parks, athletic fields and interior plantscapes.

\*Not registered for this use in California

<b>Active Ingredient:</b>	<b>By Wt.</b>
Imidacloprid .....	75.0%
<b>Other Ingredients:</b> .....	<u>25.0%</u>
<b>TOTAL:</b> .....	100.0%

Each water soluble packet contains 1.6 ounces product (0.075 lbs active ingredient)

Keep water soluble packets in outer container until immediately before use. Store in a cool, dry place but not below freezing (32°F).

EPA Reg. No. 82957-3 EPA Est. 81824-NC-001

**STOP – Read the label before use**

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

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

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

For product use information call 1-866-FOR-THOR (367-8467) or visit [www.for-thor.com](http://www.for-thor.com).

**NET WEIGHT:** \_\_\_\_\_ oz.

**Manufactured by:**

**ENSYSTEX III, Inc.**

2175 Village Drive, Fayetteville, NC 28304

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-(866)-367-8467 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
No specific antidote is available. Treat the patient symptomatically.	

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### CAUTION

Harmful if swallowed. Harmful if inhaled. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust or vapor.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Applicators and other handlers must wear long-sleeved shirt and long pants, chemical resistant gloves made of: barrier laminate ≥ 14 mils, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinylchloride (PVC) ≥ 14 mils or viton ≥ 14 mils and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

### ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops, plants or weeds. Do not apply this product or allow it to drift to blooming crops, plants or weeds if bees are foraging in the treatment area.

The properties and characteristics of this chemical are similar to those of agrochemicals that have been detected in groundwater. Using this chemical in areas where the soil is permeable, and particularly where the water table is shallow (close to the ground surface), may result in contamination of the surrounding groundwater.

## PROTECTION OF POLLINATORS



APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO 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 active plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at <http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>. Pesticide incidents (for example, bee kills) should immediately be reported to the state / tribal lead agency. For contact information for your state, go to: [www.aapco.org/officials.html](http://www.aapco.org/officials.html). Pesticide incidents should also be reported to the National Pesticide Information Center at [www.npic.orst.edu](http://www.npic.orst.edu) or directly to EPA at [beekill@epa.gov](mailto:beekill@epa.gov).

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Consult your State or Tribe for requirements specific to that jurisdiction.

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



Do not apply TURFTHOR WSP while bees are foraging. Do not apply TURFTHOR WSP to plants that are flowering. Only apply after all flower petals have fallen off.

### RESTRICTIONS

• Do not apply more than 5 water soluble packets of TURFTHOR WSP per acre per year. Do not exceed 0.4 lb. active ingredient imidacloprid per acre per year of any product containing imidacloprid.

- Do not apply in greenhouses or nurseries.
- Not for use on turf or plants being grown for sale, for commercial seed production, or for research purposes.
- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Not for use on bearing fruit or nut trees.
- Do not apply through an irrigation system.
- TURFTHOR WSP is not registered for use on golf courses in the state of California.
- Do not apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon
- Keep people and pets off treated area until spray has dried.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Keep out of reach of children and animals. Store in original containers only. Store in a cool (but not below freezing (32°F)), dry place and avoid excess heat. Handle and open container in a manner so as to prevent spillage. Do not put concentrate or dilute material into food or drink containers. Preferably store in a locked area.

Exposure to moisture or excessive handling of water soluble packets can cause them to break. Store water soluble packets in original container preferably in a locked area. Do not cut the water soluble packets when opening container.

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

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

**In Case of Spill:** Confine it, avoid contact, isolate area and keep animals and unprotected persons away. If spill is liquid, form dike around spill area and/or absorb spill with absorbent materials, such as sand, cat litter or clay. If spill is dry powder only, sweep material into a suitable container. Place damaged package in a holding container and identify contents. Contact Ensystem III at 1-866-367-8467 or Chemtrec at 1-800-424-9300 for any assistance.

### ENGINEERING CONTROLS STATEMENT

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607(d)]. Mixers and loaders handling this product while it is enclosed in intact water soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks, a chemical-resistant apron, and chemical-resistant gloves. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down."

### DILUTION AND MIXING OF TURFTHOR WSP

Each TURFTHOR WSP outer container contains a number of clear water soluble packets. Do not allow the packets to become wet at any time before putting them into a spray tank at the time of intended mixing. Handling the packets with wet hands or gloves or in a rough manner can cause them to leak. Reseal the outer container if water soluble packets are left inside after opening.

Avoid using TURFTHOR WSP packets in tanks also containing products that contain boron or free chlorine. The packet material may react with the boron or chlorine to form a non-water soluble compound instead of dissolving into the water. However chlorinated water use is acceptable and will not cause this compound to form or reaction to occur. Because the packets are soluble in water but not oil, do not attempt to use packets in diesel oil or summer spray oils.

### TANK MIXING:

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.

## INSTRUCTIONS FOR USING WATER SOLUBLE PACKAGES DIRECTLY INTO SPRAY TANKS:

Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

### Handling Instructions

Follow these steps when handling pesticide products in WSPs.

1. Mix in spray tank only.
2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
3. Keep the WSP(s) in outer packaging until just before use.
4. Keep the WSP dry prior to adding to the spray tank.
5. Handle with dry gloves and according to the label instructions for PPE.
6. Keep WSP intact. Do not cut or puncture WSP.
7. Reseal the WSP outer packaging to protect any unused WSP(s).

### Mixing Instructions

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
3. Stop adding water and stop any agitation.
4. Place intact/unopened WSP(s) into the tank.
5. Do not spray water from a hose or fill pipe to break or dissolve the WSP(s).
6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.
7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
8. Stop agitation before tank lid is opened.
9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.
10. Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
11. Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
12. Use the spray solution when mixing is complete.
13. Maintain agitation of the diluted pesticide mix during transport and application.
14. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.

### APPLICATION FOR TURF PESTS

TURFTHOR WSP controls or suppresses a wide range of listed soil inhabiting turfgrass insect pests. TURFTHOR WSP is not for use on turfgrass grown for sale (sod farms), commercial seed production or for research.

### Application Sites

Permitted sites are: lawns and landscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, golf courses (not in California), cemeteries, airports and parks.

### Application Timing

The active ingredient in TURFTHOR WSP, imidacloprid, has sufficiently long-lasting residual activity that applications can be made prior to egg laying by the target pest(s). Optimum control of turf pests will be achieved when application is made prior to egg hatch followed by sufficient irrigation or rainfall to move the active ingredient through the thatch and down into the underlying soil. Applications can be timed based on past experiences at the site or in the area, current results of adult monitoring/trapping or other methods.

If necessary, consult resources in horticulture in your area (such as your Cooperative Extension Service) to determine appropriate application timing.

### Post Application Watering and Mowing

Optimum control is achieved if irrigation or rainfall occurs within 24 hours after application. Uniformity of application may be adversely affected if turf is mowed prior to irrigation/rainfall occurring.

### Application Restrictions for Turf Grass

- Regardless of application method, do not apply more than 0.4 lb active ingredient imidacloprid per acre per year.
- Do not apply to turf that is frozen, waterlogged or is saturated with water. Turf in this condition will not allow the necessary vertical distribution of the active ingredient down into the soil.
- Do not irrigate to point of runoff or puddling following application
- Do not allow this product to contact plants in bloom if bees are foraging in the treatment area.
- **Maximum Applications Per Year:** Limited to one application per year for turf.

TURFTHOR WSP can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

### Application Equipment and Methods

Apply the indicated amount TURFTHOR WSP mixed in a volume of water sufficient to adequately distribute the active ingredient to the target area(s). Apply TURFTHOR WSP solution as a spray of uniform, coarse droplets at a pressure low enough to eliminate drift from the target area. Properly calibrated application equipment must be used to apply TURFTHOR WSP.

### Turf Application Use Rates

Use Rate Table for TURFTHOR WSP for Turf Applications		
Use Rate	Ounces (Packets) per sq. feet	Packets per acre
A	1.6 ounces (1 packet) per 8,250 to 11,000 sq. ft.	4
B	1.6 ounces (1 packet) per 8,250 sq. ft.	5

### Turf Application Volumes

The calculated amount of TURFTHOR WSP can be applied in any volume of water as long as the maximum label rate (0.4 lbs a.i. per acre per year) is not exceeded. Do not exceed the maximum label rate by applying solution to an area smaller than intended when it was mixed and diluted unless such under dosing will not result in an application rate in excess of the maximum label rate.

### Turf Pests Grouped by Use Rates

Use Rate A: Larvae of: Annual bluegrass weevil, Asiatic garden beetle, Billbug, Black turfgrass atanius, Cutworms (suppression only), European chafer, European Crane Fly, Green June beetle, Japanese beetle, Northern masked chafer, Oriental beetle, *Phyllophaga* spp., Southern masked chafer

Use Rate B: Chinch bug (suppression only), Mole Crickets

### Application Against Specific Turf Pests

**Grubs, billbugs, annual bluegrass weevil and European crane fly:** Optimum control is obtained when application is made prior to egg hatch.

**Chinch bugs:** To maximize suppression, make application prior to the hatch of the first instar nymphs.

**Mole crickets:** Make application prior to or during the period of peak egg hatch. Apply an adulticide in conjunction with TURFTHOR WSP if adults or large nymphs are present and tunneling at the time of application.

#### Calculating Amounts of TURFTHOR WSP to Mix for Turf Pests

To mix and apply any amount of TURFTHOR WSP for turf pests based on number of acres, determine:

A = # of acres of area to be treated = square feet of area to be treated / 43,560 (1 acre = 43,560 sq. ft.)

B = Applicable TURFTHOR WSP Use Rate (packets per acre) for the target pest(s) from the Use Rate Table. If treating for more than one type of pest, select the highest listed rate.

Calculate the amount of TURFTHOR WSP to mix for turf pests as follows:

Packets TURFTHOR WSP to use = A x B. Round down to nearest integer.

example: (56,628 sq. feet / 43,560 sq. feet) x (5 packets / acre) = 6.5 = round down to use 6 packets"

Mix this amount of TURFTHOR WSP in the amount of water needed to make the application.

### FOLIAR AND BROADCAST APPLICATION FOR ORNAMENTAL PESTS

TURFTHOR WSP, applied to foliage and broadcast on the soil, controls a wide range of listed insects on trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, foliage plants, ground covers and interior plantscapes. Non-bearing trees are perennial plants that will not produce a harvestable agricultural commodity within the next 12 months. TURFTHOR WSP is a systemic insecticide meaning it will be translocated by the plant's vascular system from the roots up into the body of the plant. This means optimum effectiveness of TURFTHOR WSP is realized when TURFTHOR WSP is applied on or near a growing portion of the plant from which it can be translocated to other parts of the plant. Combining TURFTHOR WSP with a nitrogen containing fertilizer may accelerate or otherwise enhance the uptake of the active ingredient into the plant.

Translocation of soil directed applications made to woody stemmed plants can be delayed by up to 60 days. Optimum levels of control are realized when applications are performed sufficiently prior to anticipated pests infestations.

#### Application Sites

For use on ornamental trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, ground covers, bedding plants and foliage plants. Permitted sites are: landscapes, ornamental gardens, parks, lawns, golf courses (not in California) and interior plantscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, cemeteries, airports and parks.

#### Application Preparation

TURFTHOR WSP can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

If necessary, consult resources in horticulture in your area (such as your Cooperative Extension Service) to determine appropriate application timing.

#### Foliar Application

Foliar application of TURFTHOR WSP offers local systemic activity against listed insect pests. Applications to plants with hard to wet foliage such as holly, pine or ivy should be applied in combination with a spreader / sticker.

#### Ornamental Application to Control Ants (except fire, pharaoh, harvester, carpenter ants)

TURFTHOR WSP can be used to indirectly control ants when applied to control aphids, scale insects, mealybugs and other sucking insects on ornamentals thereby limiting the amount of honeydew available.

#### Foliar Application Volumes and Application Methods

Establish quantity of water necessary to uniformly wet foliage. Mix required amount of TURFTHOR WSP (from the table below) in that quantity of water. Begin treatments prior to establishment of high pest populations. Reapply as needed up to a maximum of 5 water soluble packets per acre per year.

Mixing Table for TURFTHOR WSP for Foliar Applications
1.6 ounces (1 packet) per 300 gallons of water.

#### Ornamental Pests Controlled by Foliar Application

Adelgids, Aphids, Japanese beetles, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), Mealybugs, Psyllids, Sawfly larvae, Thrips (suppression), Whiteflies.

#### Broadcast Application

##### Broadcast Application Use Rate

Use Rate Table for TURFTHOR WSP for Broadcast Applications
1.6 ounces (1 packet) per 8,250 to 11,000 sq. ft.

#### Broadcast Application Volume and Application Method

Mix required amount of product in a quantity of water sufficient to uniformly treat area. Use a minimum of 2 gallons of water per 1000 square feet. To achieve optimum control, irrigate treated area in order to incorporate treatment into upper level of soil. May be applied and incorporated into flowerbed soil before planting.

#### Foliar and Broadcast Application Restrictions

- Regardless of application method, do not apply more than 0.4 lb active ingredient imidacloprid per acre per year.
- Do not exceed the maximum label rate by applying solution to an area smaller than intended when it was mixed and diluted unless such under dosing will not result in an application rate in excess of the maximum label rate (0.4 lbs a.i. per acre per year).
- TURFTHOR WSP is not for use on plants being grown for sale, fruit, nut or commercial seed production or for research purposes.
- Do not apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon
- Do not irrigate to point of runoff or puddling following application.
- Do not apply to waterlogged, saturated or frozen soils since this will prevent penetration to the root zone

#### Ornamental Pests Controlled by Broadcast Application

White grub larvae such as Japanese beetle larvae, Chafers, *Phyllophaga* spp., Asiatic garden beetle, Oriental beetle

### SOIL INJECTION AND SOIL DRENCH FOR ORNAMENTAL PESTS

TURFTHOR WSP, applied as a soil drench or soil injection, controls a wide range of listed insects on trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, foliage plants, ground covers and interior plantscapes. Non-bearing trees are perennial plants that will not produce a harvestable agricultural commodity within the next 12 months. TURFTHOR WSP is a systemic insecticide meaning it will be translocated by the plant's vascular system from the roots up into the body of the plant. This means optimum effectiveness of TURFTHOR WSP is realized when TURFTHOR WSP is applied on or near a growing portion of the plant from which it can be translocated to other parts of the plant. Combining TURFTHOR WSP with a nitrogen containing fertilizer may accelerate or otherwise enhance the uptake of the active ingredient into the plant.

Translocation of soil directed applications made to woody stemmed plants can be delayed by up to 60 days. Optimum levels of control are realized when applications are performed sufficiently prior to anticipated pests infestations.

Applications to trees for the control of existing borer infestations may not prevent the eventual loss of the tree due to existing damage already caused by the pest and stress to the tree caused by the pest infestation.

## Application Sites

For use on ornamental plants, trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, ground covers, bedding plants and foliage plants. Permitted sites are: landscapes, ornamental gardens, parks, lawns, golf courses (not in California) and interior plantscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, cemeteries, airports and parks,.

## Application Preparation

TURFTHOR WSP can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

If necessary, consult resources in horticulture in your area (such as your Cooperative Extension Service) to determine appropriate application timing.

## Ornamental Pests Controlled by Soil Injection or Drench Application

Adelgids, Aphids, Armored scales (suppression), Black vine weevil larvae, Emerald ash borer, Eucalyptus longhorned borer, Flatheaded borers (including bronze birch borer and alder borer), Japanese beetles, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), Leaf miners, Mealybugs, Pine tip moth larvae, Psyllids, Royal palm bugs, Sawfly larvae, Soft scales, Thrips (suppression only), White grub larvae, Whiteflies.

## Soil Injection for Trees

**Restriction: Soil Injection is not allowed in Nassau and Suffolk Counties of New York**

### Soil Injection Use Rate for Trees

<b>Use Rate Table for TURFTHOR WSP for Soil Injection for Trees</b>
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1.6 ounces (1 packet) per 24 to 48 inches of cumulative trunk diameter
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### Soil Injection Volume and Application Method for Trees

Mix the calculated amount of TURFTHOR WSP in the amount of water determined to be adequate for the treatment to be adequately dispersed. Apply at a low pressure according to one of the two following methods. Make a minimum of 4 injection holes per tree. For optimum control, maintain a high level of soil moisture in the treated area for 7 to 10 days after treatment.

Grid Injection: Evenly space holes on 2.5 foot centers in a grid pattern in the soil beneath the tree's branches/foliage out to the tree's drip line.

Basal Injection: Evenly space injection holes around the base of the tree no more than 12 inches out from the tree.

## Soil Drench for Trees

### Soil Drench Use Rate for Trees

<b>Use Rate Table for TURFTHOR WSP for Soil Drench for Trees</b>
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1.6 ounces (1 packet) per 24 to 48 inches of cumulative trunk diameter
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### Soil Drench Volume and Application Method for Trees

Mix the calculated amount of TURFTHOR WSP in the amount of water determined to be adequate for the solution to be adequately dispersed. Apply solution at a rate of no less than 10 gallons per 1000 square feet around the base of the tree. If present, remove any barrier to the movement of the solution into the soil such as a plastic vapor barrier.

## Soil Injection for Shrubs

**Restriction: Soil Injection is not allowed in Nassau and Suffolk Counties of New York**

### Soil Injection Use Rate for Shrubs

<b>Use Rate Table for TURFTHOR WSP for Soil Injection for Shrubs</b>
--

1.6 ounces (1 packet) per 24 to 48 cumulative ft. of shrub height
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## Soil Injection Volume and Application Method for Shrubs

Mix the calculated amount of TURFTHOR WSP in the amount of water determined to be adequate for the treatment to be adequately dispersed. Apply at a low pressure making a minimum of 4 injection holes per shrub. For optimum control, maintain a high level of soil moisture in the treated area for 7 to 10 days after treatment.

## Soil Drench for Shrubs

### Soil Drench Use Rate for Shrubs

<b>Use Rate Table for TURFTHOR WSP for Soil Drench for Shrubs</b>
---

1.6 ounces (1 packet) per 24 to 48 cumulative ft. of shrub height
---

### Soil Drench Volume and Application Method for Shrubs

Mix the calculated amount of TURFTHOR WSP in the amount of water determined to be adequate for the solution to be adequately dispersed. Apply solution at a rate of no less than 10 gallons per 1000 square feet around the base of the shrub. If present, remove any barrier to the movement of the solution into the soil such as a plastic vapor barrier.

### Application Restrictions for Soil Drench and Soil Injection

- TURFTHOR WSP is not for use on plants being grown for sale, fruit, nut or commercial seed production or for research purposes.
- Regardless of application method, do not apply more than 0.4 lb active ingredient imidacloprid per acre per year.
- Do not apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon
- Do not irrigate to point of runoff or puddling following application.
- Do not apply to waterlogged, saturated, or frozen soils since this will prevent penetration to the root zone.

## IMPORTANT READ BEFORE USE

<b>NOTICE:</b> Read the entire Directions for Use, Conditions of Sale, Disclaimer of Warranties and Limitations of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.
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**CONDITIONS OF SALE:** The Directions for Use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond the control of Ensystem III, Inc., it is impossible for Ensystem III to eliminate all risks associated with the use of this product such as ineffectiveness or unintended consequences. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Ensystem III harmless for any claims relating to such factors.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable laws, Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the Directions for Use under normal conditions of use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ENSYSTEM III MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, under abnormal conditions or under conditions not reasonably foreseeable by (or beyond the control of) seller or Ensystem III, Inc., and buyer assumes the risk of any such use.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, Ensystem III shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ENSYSTEM III AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ENSYSTEM III, THE REPLACEMENT OF THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

TURFTHOR is a registered trademark of Ensystem III, Inc.

EPA APPROVAL DATE



# TURFTHOR WP

For foliar and systemic control of listed insect pests of turfgrass, landscape ornamentals, shrubs and trees in lawns, golf courses\*, landscapes, playgrounds, parks, athletic fields and interior plantscapes.

\*Not registered for this use in California

<b>Active Ingredient:</b>	<b>By Wt.</b>
Imidacloprid .....	75.0%
<b>Other Ingredients:</b> .....	<u>25.0%</u>
<b>TOTAL:</b> .....	100.0%

Store in a cool, dry place but not below freezing (32°F).

EPA Reg. No. 82957-3 EPA Est. 81824-NC-001

**STOP – Read the label before use**

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

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

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

For product use information call 1-866-FOR-THOR (367-8467) or visit [www.for-thor.com](http://www.for-thor.com).

NET WEIGHT: \_\_\_\_\_ oz.

Manufactured by:

**ENSYSTEX III, Inc.**

2175 Village Drive, Fayetteville, NC 28304

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-(866)-367-8467 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
No specific antidote is available. Treat the patient symptomatically.	

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Harmful if swallowed. Harmful if inhaled. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust or vapor.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Applicators and other handlers must wear long-sleeved shirt and long pants, chemical resistant gloves made of: barrier laminate ≥ 14 mils, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene ≥ 14 mils, polyvinylchloride (PVC) ≥ 14 mils or viton ≥ 14 mils and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

### ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops, plants or weeds. Do not apply this product or allow it to drift to blooming crops, plants or weeds if bees are foraging in the treatment area.

The properties and characteristics of this chemical are similar to those of agrochemicals that have been detected in groundwater. Using this chemical in areas where the soil is permeable, and particularly where the water table is shallow (close to the ground surface), may result in contamination of the surrounding groundwater.



## PROTECTION OF POLLINATORS



APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO 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 active plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at <http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>. Pesticide incidents (for example, bee kills) should immediately be reported to the state / tribal lead agency. For contact information for your state, go to: [www.aapco.org/officials.html](http://www.aapco.org/officials.html). Pesticide incidents should also be reported to the National Pesticide Information Center at [www.npic.orst.edu](http://www.npic.orst.edu) or directly to EPA at [beekill@epa.gov](mailto:beekill@epa.gov).

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Consult your State or Tribe for requirements specific to that jurisdiction.

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



Do not apply TURFTHOR WP while bees are foraging. Do not apply TURFTHOR WP to plants that are flowering. Only apply after all flower petals have fallen off.

## RESTRICTIONS

- Do not apply more than 8.6 ounces (0.4 lb. a.i.) of TURFTHOR WP per acre per year for any type(s) or combination(s) of applications.

- Do not apply in greenhouses or nurseries.
- Not for use on turf or plants being grown for sale, for commercial seed production, or for research purposes.
- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Not for use on bearing fruit or nut trees.
- Do not apply through an irrigation system.
- TURFTHOR WP is not registered for use on golf courses in the state of California.
- Do not apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon
- Keep people and pets off treated area until spray has dried

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Keep out of reach of children and animals. Store in original containers only. Store in a cool (but not below freezing (32°F)), dry place and avoid excess heat. Handle and open container in a manner so as to prevent spillage. Do not put concentrate or dilute material into food or drink containers. Preferably store in a locked area.

Exposure to moisture or excessive handling of water soluble packets can cause them to break. Store water soluble packets in original container preferably in a locked area. Do not cut the water soluble packets when opening container.

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

**Container Disposal:** 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

**In Case of Spill:** Confine it, avoid contact, isolate area and keep animals and unprotected persons away. If spill is liquid, form dike around spill area and/or absorb spill with absorbent materials, such as sand, cat litter or clay. If spill is dry powder only, sweep material into a suitable container. Place damaged package in a holding container and identify contents. Contact Ensystem III at 1-866-367-8467 or Chemtrec at 1-800-424-9300 for any assistance.

## DILUTION AND MIXING OF TURFTHOR WP

To mix, measure out the required amount of TURFTHOR WP. Pour this amount of TURFTHOR WP into the spray tank as it is being filled with water with the agitator operating.

Do not use kitchen utensils to mix or apply this product. Use equipment dedicated to pesticide measurement and application.

## TANK MIXING:

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 FOR TURF PESTS

TURFTHOR WP controls or suppresses a wide range of listed soil inhabiting turfgrass insect pests. TURFTHOR WP is not for use on turfgrass grown for sale (sod farms), commercial seed production or for research.

## Application Sites

Permitted sites are: lawns and landscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, golf courses (not in California), cemeteries, airports and parks.

### Application Timing

The active ingredient in TURFTHOR WP, imidacloprid, has sufficiently long-lasting residual activity that applications can be made prior to egg laying by the target pest(s). Optimum control of turf pests will be achieved when application is made prior to egg hatch followed by sufficient irrigation or rainfall to move the active ingredient through the thatch and down into the underlying soil. Applications can be timed based on past experiences at the site or in the area, current results of adult monitoring/trapping or other methods.

If necessary, consult resources in horticulture in your area (such as your Cooperative Extension Service) to determine appropriate application timing.

### Post Application Watering and Mowing

Optimum control is achieved if irrigation or rainfall occurs within 24 hours after application. Uniformity of application may be adversely affected if turf is mowed prior to irrigation/rainfall occurring.

### Application Restrictions for Turf Grass

- Regardless of application method, do not apply more than 0.4 lb active ingredient imidacloprid per acre per year.
- Do not apply to turf that is frozen, waterlogged or is saturated with water. Turf in this condition will not allow the necessary vertical distribution of the active ingredient down into the soil.
- Do not irrigate to point of runoff or puddling following application
- Do not allow this product to contact plants in bloom if bees are foraging in the treatment area.
- **Maximum Applications Per Year:** Limited to one application per year for turf.

TURFTHOR WP can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

### Application Equipment and Methods

Apply the indicated amount TURFTHOR WP mixed in a volume of water sufficient to adequately distribute the active ingredient to the target area(s). Apply TURFTHOR WP solution as a spray of uniform, coarse droplets at a pressure low enough to eliminate drift from the target area. Properly calibrated application equipment must be used to apply TURFTHOR WP.

### Turf Application Use Rates

Use Rate Table for TURFTHOR WP for Turf Applications		
Use Rate	Ounces per acre	Teaspoons per 1,000 sq. feet
A	6.4⇒8.6 ounces per acre	3⇒4 level teaspoons per 1,000 sq. ft.
B	8.6 ounces per acre	4 level teaspoons per 1,000 sq. ft.

1 level teaspoon TURFTHOR WP = 1.4 grams TURFTHOR WP = 0.05 oz. TURFTHOR WP

3 level teaspoons = 1 tablespoon

### Turf Application Volumes

The calculated amount of TURFTHOR WP can be applied in any volume of water as long as the maximum label rate (8.6 ounces Turfthor WP per acre per year; 0.4 lb. imidacloprid per acre per year) is not exceeded. Do not exceed the maximum label rate by applying solution to an area smaller than intended when it was mixed and diluted unless such under dosing will not result in an application rate in excess of the maximum label rate (8.6 ounces Turfthor WP per acre per year; 0.4 lb. imidacloprid per acre per year).

### Turf Pests Grouped by Use Rates

Use Rate A: Larvae of: Annual bluegrass weevil, Asiatic garden beetle, Billbug, Black turfgrass atenioides, Cutworms (suppression only), European chafer, European Crane Fly, Green June beetle, Japanese beetle, Northern masked chafer, Oriental beetle, *Phyllophaga* spp., Southern masked chafer

Use Rate B: Chinch bug (suppression only), Mole Crickets

### Application Against Specific Turf Pests

**Grubs, billbugs, annual bluegrass weevil and European crane fly:** Optimum control is obtained when application is made prior to egg hatch.

**Chinch bugs:** To maximize suppression, make application prior to the hatch of the first instar nymphs.

**Mole crickets:** Make application prior to or during the period of peak egg hatch. Apply an adulticide in conjunction with TURFTHOR WP if adults or large nymphs are present and tunneling at the time of application.

### Calculating Amounts of TURFTHOR WP to Mix for Turf Pests

To mix and apply any amount of TURFTHOR WP for turf pests based on number of square feet, determine:

A = # of Square feet of area to be treated / 1000 (for example 5,500 sq. ft. /1000 = 5.5)

B = Applicable TURFTHOR WP Use Rate (teaspoons per 1000 square feet) for the target pest(s) from the Use Rate Table. If treating for more than one type of pest, select the highest listed rate.

Calculate the amount of TURFTHOR WP to mix for turf pests as follows:

Teaspoons TURFTHOR WP to use = A X B

Ounces TURFTHOR WP to use = A X B X 0.05

Mix this amount of TURFTHOR WP in the amount of water needed to make the application.

## FOLIAR AND BROADCAST APPLICATION FOR ORNAMENTAL PESTS

TURFTHOR WP, applied to foliage and broadcast on the soil, controls a wide range of listed insects on trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, foliage plants, ground covers and interior landscapes. Non-bearing trees are perennial plants that will not produce a harvestable agricultural commodity within the next 12 months. TURFTHOR WP is a systemic insecticide meaning it will be translocated by the plant's vascular system from the roots up into the body of the plant. This means optimum effectiveness of TURFTHOR WP is realized when TURFTHOR WP is applied on or near a growing portion of the plant from which it can be translocated to other parts of the plant. Combining TURFTHOR WP with a nitrogen containing fertilizer may accelerate or otherwise enhance the uptake of the active ingredient into the plant.

Translocation of soil directed applications made to woody stemmed plants can be delayed by up to 60 days. Optimum levels of control are realized when applications are performed sufficiently prior to anticipated pests infestations.

### Application Sites

For use on ornamental trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, ground covers, bedding plants and foliage plants. Permitted sites are: landscapes, ornamental gardens, parks, lawns, golf courses (not in California) and interior landscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, cemeteries, airports and parks.

### Application Preparation

TURFTHOR WP can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

If necessary, consult resources in horticulture in your area (such as your Cooperative Extension Service) to determine appropriate application timing.

### Foliar Application

Foliar application of TURFTHOR WP offers local systemic activity against listed insect pests. Applications to plants with hard to wet foliage such as holly, pine or ivy should be applied in combination with a spreader / sticker.

### Ornamental Application to Control Ants (except fire, pharaoh, harvester, carpenter ants)

TURFTHOR WP can be used to indirectly control ants when applied to control aphids, scale insects, mealybugs and other sucking insects on ornamentals thereby limiting the amount of honeydew available.

### Foliar Application Volumes and Application Methods

Establish quantity of water necessary to uniformly wet foliage. Mix required amount of TURFTHOR WP (from the table below) in that quantity of water. Begin treatments prior to establishment of high pest populations. Reapply as needed up to a maximum of 0.4 lb. a.i. per acre per year.

Mixing Table for TURFTHOR WP for Foliar Applications	
Gallons Water	Level Teaspoons TURFTHOR WP
2.5	0.25
5.0	0.50
10.0	1.00
25.0	2.50
50.0	5.00
100.0	10.00

1 level teaspoon TURFTHOR WP = 1.4 grams TURFTHOR WP = 0.05 oz. TURFTHOR WP

3 level teaspoons = 1 tablespoon

### Ornamental Pests Controlled by Foliar Application

Adelgids, Aphids, Japanese beetles, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), Mealybugs, Psyllids, Sawfly larvae, Thrips (suppression), Whiteflies.

### Broadcast Application

#### Broadcast Application Use Rate

Use Rate Table for TURFTHOR WP for Broadcast Applications
6.4⇒8.6 ounces per acre / 3⇒4 level teaspoons per 1,000 sq. ft.

#### Broadcast Application Volume and Application Method

Mix required amount of product in a quantity of water sufficient to uniformly treat area. Use a minimum of 2 gallons of water per 1000 square feet. To achieve optimum control, irrigate treated area in order to incorporate treatment into upper level of soil. May be applied and incorporated into flowerbed soil before planting.

#### Foliar and Broadcast Application Restrictions

- Regardless of application method, do not apply more than 0.4 lb active ingredient imidacloprid per acre per year.
- Do not exceed the maximum label rate by applying solution to an area smaller than intended when it was mixed and diluted unless such under dosing will not result in an application rate in excess of the maximum label rate (0.4 lb. a.i. per acre per year).
- TURFTHOR WP is not for use on plants being grown for sale, fruit, nut or commercial seed production or for research purposes.
- Do not apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon
- Do not irrigate to point of runoff or puddling following application.
- Do not apply to waterlogged, saturated or frozen soils since this will prevent penetration to the root zone

#### Ornamental Pests Controlled by Broadcast Application

White grub larvae such as Japanese beetle larvae, Chafers, *Phyllophaga* spp., Asiatic garden beetle, Oriental beetle

## SOIL INJECTION AND SOIL DRENCH FOR ORNAMENTAL PESTS

TURFTHOR WP, applied as a soil drench or soil injection, controls a wide range of listed insects on trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, foliage plants, ground covers and interior plantscapes. Non-bearing trees are perennial plants that will not produce a harvestable agricultural commodity within the next 12 months. TURFTHOR WP is a systemic insecticide meaning it will be translocated by the plant's vascular system from the roots up into the body of the plant. This means optimum effectiveness of TURFTHOR WP is realized when TURFTHOR WP is applied on or near a growing portion of the plant from which it can be translocated to other parts of the plant. Combining TURFTHOR WP with a nitrogen containing fertilizer may accelerate or otherwise enhance the uptake of the active ingredient into the plant.

Translocation of soil directed applications made to woody stemmed plants can be delayed by up to 60 days. Optimum levels of control are realized when applications are performed sufficiently prior to anticipated pests infestations.

Applications to trees for the control of existing borer infestations may not prevent the eventual loss of the tree due to existing damage already caused by the pest and stress to the tree caused by the pest infestation.

#### Application Sites

For use on ornamental plants trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, ground covers, bedding plants and foliage plants. Permitted sites are: landscapes, ornamental gardens, parks, lawns, golf courses (not in California) and interior plantscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, cemeteries, airports and parks.

#### Application Preparation

TURFTHOR WP can be mixed with other insecticides, miticides, fungicides and fertilizers. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

If necessary, consult resources in horticulture in your area (such as your Cooperative Extension Service) to determine appropriate application timing.

#### Ornamental Pests Controlled by Soil Injection or Drench Application

Adelgids, Aphids, Armored scales (suppression), Black vine weevil larvae, Emerald ash borer, Eucalyptus longhorned borer, Flatheaded borers (including bronze birch borer and alder borer), Japanese beetles, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), Leaf miners, Mealybugs, Pine tip moth larvae, Psyllids, Royal palm bugs, Sawfly larvae, Soft scales, Thrips (suppression only), White grub larvae, Whiteflies.

#### Soil Injection for Trees

**Restriction: Soil Injection is not allowed in Nassau and Suffolk Counties of New York**

#### Soil Injection Use Rate for Trees

Use Rate Table for TURFTHOR WP for Soil Injection for Trees
0.7 to 1.4 level teaspoons per inch of trunk diameter (DBH)* / 1 to 2 ounces per 30 cumulative inches of trunk diameter (DBH)*

\*DBH = Diameter at Breast Height measured at 4.5 feet above the ground

#### Soil Injection Volume and Application Method for Trees

Mix the calculated amount of TURFTHOR WP in the amount of water determined to be adequate for the treatment to be adequately dispersed. Apply at a low pressure according to one of the two following methods. Make a minimum of 4 injection holes per tree. For optimum control, maintain a high level of soil moisture in the treated area for 7 to 10 days after treatment.

Grid Injection: Evenly space holes on 2.5 foot centers in a grid pattern in the soil beneath the tree's branches/foliage out to the tree's drip line.

Basal Injection: Evenly space injection holes around the base of the tree no more than 12 inches out from the tree.

## Soil Drench for Trees

### Soil Drench Use Rate for Trees

Use Rate Table for TURFTHOR WP for Soil Drench for Trees
--

0.7 to 1.4 level teaspoons per inch of trunk diameter (DBH) */
1 to 2 ounces per 30 cumulative inches of trunk diameter (DBH)*

\*DBH = Diameter at Breast Height measured at 4.5 feet above the ground

### Soil Drench Volume and Application Method for Trees

Mix the calculated amount of TURFTHOR WP in the amount of water determined to be adequate for the solution to be adequately dispersed. Apply solution at a rate of no less than 10 gallons per 1000 square feet around the base of the tree. If present, remove any barrier to the movement of the solution into the soil such as a plastic vapor barrier.

## Soil Injection for Shrubs

**Restriction: Soil Injection is not allowed in Nassau and Suffolk Counties of New York**

### Soil Injection Use Rate for Shrubs

Use Rate Table for TURFTHOR WP for Soil Injection for Shrubs
--

0.7 to 1.4 level teaspoons TURFTHOR WP per foot of shrub height/
1 to 2 ounces per 30 cumulative feet of shrub height

### Soil Injection Volume and Application Method for Shrubs

Mix the calculated amount of TURFTHOR WP in the amount of water determined to be adequate for the treatment to be adequately dispersed. Apply at a low pressure making a minimum of 4 injection holes per shrub. For optimum control, maintain a high level of soil moisture in the treated area for 7 to 10 days after treatment.

## Soil Drench for Shrubs

### Soil Drench Use Rate for Shrubs

Use Rate Table for TURFTHOR WP for Soil Drench for Shrubs
---

0.7 to 1.4 level teaspoons TURFTHOR WP per foot of shrub height/
1 to 2 ounces per 30 cumulative feet of shrub height

### Soil Drench Volume and Application Method for Shrubs

Mix the calculated amount of TURFTHOR WP in the amount of water determined to be adequate for the solution to be adequately dispersed. Apply solution at a rate of no less than 10 gallons per 1000 square feet around the base of the shrub. If present, remove any barrier to the movement of the solution into the soil such as a plastic vapor barrier.

## Application Restrictions for Soil Drench and Soil Injection

- TURFTHOR WP is not for use on plants being grown for sale, fruit, nut or commercial seed production or for research purposes.
- Regardless of application method, do not apply more than 0.4 lb active ingredient imidacloprid per acre per year.
- Do not apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon
- Do not irrigate to point of runoff or puddling following application.
- Do not apply to waterlogged, saturated, or frozen soils since this will prevent penetration to the root zone.

## IMPORTANT READ BEFORE USE

**NOTICE:** Read the entire Directions for Use, Conditions of Sale, Disclaimer of Warranties and Limitations of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

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