

83923-5

08/21/2007

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U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Registration Division (H7505C)
 401 "M" St., S.W.
 Washington, D.C. 20460

EPA Reg. Number: 83923-5	Date of Issuance: <i>[Handwritten]</i>
Term of Issuance: Conditional	
Name of Pesticide Product: Turfthor 2F	

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):
Mr. Michael Kellogg
Ensystex IV, Inc.
c/o Pyxis Regulatory Consulting, Inc.
4110 136th Street, NW
Gig Harbor, WA 98332

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/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act:
 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 conditionally registered in accordance with FIFRA sec. 3(c)(7)(A). Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3)(c)(2)(B).

1. Revise the EPA Registration Number to read, EPA Reg. No. "83923-5".

Signature of Approving Official:

Dani Daniel
 Insecticide-Rodenticide Branch
 Registration Division (7505P)

Date:

AUG 21 2007

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2. Add "Apply this product only as specified on this label" following the "Environmental Hazards statement".

3. Add "Do not apply through any irrigation system" as a restriction under the "Application Preparation" section under "Foliar and Broadcast Application for Ornamental Pests" section.

4. Within eighteen months of the date of this registration, submit to the Agency the required one year storage stability study (830.6317) for the proposed product under warehouse conditions. The corrosion characteristics study (830.6320) may be carried out concurrently. It is recommended that observations be made at 0,3, 6, 9, and 12 months.

5. Submit two copies of your final printed label before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(a). Your release for shipment of the product constitute acceptance of these conditions.

A stamped copy of the label is enclosed for your records. If you have any questions regarding this notice, please contact me at (703) 305-5409.

Enclosure



3/5

TURFTHOR 2F

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

Active Ingredient:	By Wt.
Imidacloprid	21.4%
Other Ingredients:	78.6%
TOTAL:	100.0%

EPA Reg. No. 83923-X EPA Est.

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.

NET CONTENTS: As marked on container

Manufactured by:

ENSYSTEX IV, Inc.

Fayetteville, NC 28303

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

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Keep children and pets off treated area until spray is dry.

Personal Protective Equipment: Applicators and other handlers must wear long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton and shoes plus socks (PPE). Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, 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 or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting 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.

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.

Do not apply more than 1.6 pints (0.4 lbs of active ingredient) of TURFTHOR 2F per acre per year for any type(s) or combination(s) of applications.

Do not apply in greenhouses or nurseries.

Not for use on sod farm turf or grass grown for commercial seed production.

Not for use on bearing fruit or nut trees.

Do not apply through an irrigation system.

ACCEPTED
 with COMMENTS
 In EPA Letter Dated:

AUG 21 2007

Under the Federal Insecticide,
 Fungicide, and Rodenticide Act,
 as amended, for the pesticide
 registered under EPA Reg. No.

83923-5

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, 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.

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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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. Place damaged package in a holding container and identify contents. Contact Ensysytem IV at 1-866-367-8467 or Chemtrec at 1-800-424-9300 for any assistance.

APPLICATION FOR TURF PESTS

TURFTHOR 2F controls or suppresses a wide range of soil inhabiting turfgrass insect pests. TURFTHOR 2F is not for use on turfgrass grown for sale (sod farms), commercial seed production or for research.

Application Sites

Permitted sites include but are not limited to lawns, grounds and landscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, golf courses, cemeteries, airports and parks.

Application Timing

The active ingredient in TURFTHOR 2F, 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 Precautions and Preparations

Keep children and pets off treated areas until spray has dried.

Application should not be made 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.

TURFTHOR 2F 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 2F mixed in a volume of water sufficient to adequately distribute the active ingredient to the target area(s). Apply TURFTHOR 2F 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 2F.

Turf Application Use Rates

Use Rate Table for TURFTHOR 2F for Turf Applications	
Use Rate	Ounces (Packets) per 1,000 sq. feet
A	1.25 to 1.6 pt per acre or 0.46 to 0.6 fl oz (14 to 17 ml) per 1000 sq. ft..
B	1.6 pt per acre or 0.6 fl oz (17 ml) per 1000 sq. ft.

Turf Application Volumes

The calculated amount of TURFTHOR 2F can be applied in any volume of water as long as the maximum label rate 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 ateniinus, 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 Recommendations 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 2F if adults or large nymphs are present and tunneling at the time of application.

FOLIAR AND BROADCAST APPLICATION FOR ORNAMENTAL PESTS

TURFTHOR 2F, applied to foliage and broadcast on the soil, controls a wide range of 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 2F is not for use on plants being grown for sale, fruit, nut or commercial seed production or for research purposes.

TURFTHOR 2F 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 2F is realized when TURFTHOR 2F 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 2F 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 pest infestations.

Application Sites

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

Application Preparation

TURFTHOR 2F 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 2F offers local systemic activity against 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

TURFTHOR 2F 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 2F (from the table below) in that quantity of water. Begin treatments prior to establishment of high pest populations. Reapply as needed.

Mixing Table for TURFTHOR 2F for Foliar Applications	
	1.5 fl oz (45 ml) per 100 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 2F for Broadcast Applications	
	0.46 to 0.6 fl oz (14 to 17 ml) 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.

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.

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 2F, applied as a soil drench or soil injection, controls a wide range of 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 2F is not for use on plants being grown for sale, fruit, nut or commercial seed production or for research purposes.

TURFTHOR 2F 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 2F is realized when TURFTHOR 2F 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 2F 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 pest 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 including but not limited to trees (including non-bearing fruit and nut trees), shrubs, evergreens, flowers, ground covers, bedding plants and foliage plants. Permitted sites include but are not limited to landscapes, forests (public and private), ornamental gardens, parks, lawns, grounds, golf courses and interior plantscapes at and/or around residences including multi-unit, commercial, office and shopping buildings and complexes, recreational areas, playgrounds, athletic fields, golf courses, cemeteries, airports and parks, public and private wooded and forested areas.

Application Preparation

TURFTHOR 2F 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

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

Soil Injection Use Rate for Trees

Use Rate Table for TURFTHOR 2F for Soil Injection for Trees
0.1 to 0.2 fl oz (3 to 6 ml) per inch of trunk diameter (D. B. H.)

Soil Injection Volume and Application Method for Trees

Mix the calculated amount of TURFTHOR 2F 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 2F for Soil Drench for Trees
0.1 to 0.2 fl oz (3 to 6 ml) per inch of trunk diameter (D. B. H.)

Soil Drench Volume and Application Method for Trees

Mix the calculated amount of TURFTHOR 2F 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

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

Soil Injection Use Rate for Shrubs

Use Rate Table for TURFTHOR 2F for Soil Injection for Shrubs
0.1 to 0.2 fl oz (3 to 6 ml) per foot of shrub height

Soil Injection Volume and Application Method for Shrubs

Mix the calculated amount of TURFTHOR 2F 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 2F for Soil Drench for Shrubs
0.1 to 0.2 fl oz (3 to 6 ml) per foot of shrub height

Soil Drench Volume and Application Method for Shrubs

Mix the calculated amount of TURFTHOR 2F 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.

ATTENTION

Do not graze treated areas or use clippings from treated areas for feed or forage.

Avoid runoff or puddling of irrigation water following application.

Avoid application to areas in which penetration to the root zone is unlikely to occur such as areas that are waterlogged, saturated or frozen.

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.

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 IV, Inc., it is impossible for Ensystem IV 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 IV 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. ENSYSTEM IV 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 IV, Inc., and buyer assumes the risk of any such use.

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Revised 05/07