

# U.S. Environmental Protection Agency

Office of Chemical Safety and Pollution Prevention
Office of Pesticide Programs
Registration Division (7504P)
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

# NOTICE OF PESTICIDE:

X Registration

\_ Reregistration
Under FIFRA, as amended

EPA Reg. Number:

Date of Issuance:

42750-255

SEP 1 9 2013

Term of Issuance: Unconditional

Name of Pesticide Product:

Fludioxonil 1L Turf

Name and Address of Registrant (include ZIP Code):

Albaugh, Inc. P.O. Box 2127

Valdosta, GA 31604

**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, the correspondence on this product always refer to the above EPA registration number.

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

The Basic Confidential Statement of Formula (CSF) dated 5/22/2013 is acceptable.

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

1. Submit and/or cite all data required for registration of your product under FIFRA sec 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

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**Signature of Approving Official:** 

Date:

SEP 1 9 2013

Shaja B. Joyner, Product Manager (20)

Fungicide Branch/Registration Division/OPP/OCSPP (7504P)

EPA Form 8570-6

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- 2. You must submit the following data before the due date of 10/7/2014:
  - a. Storage Stability (830.6317) and Corrosion Characteristics (830.6320) studies. At this time, the Agency is not accepting the accelerated storage stability study to satisfy the data requirement.
- 3. Make the following change to the label:
  - a. Change the product registration number to "EPA Reg. No. 42750-255"
- 4. Submit one copy of the revised final printed label for the record before the product is released for shipment.

Your release for shipment of the product constitutes acceptance of these conditions.

A copy of the label stamped "Accepted" is enclosed for your records.

Shaja B. Joyner Product Manager (20) Fungicide Branch Registration Division (7504P)

# **Enclosures:**

Label stamped "Accepted"
Product Chemistry Review dated 7/2/2013 {DP412850}
Acute Toxicity Review dated 6/10/2013 {DP412359}

#### FLUDIOXONIL 1L TURF

#### Fungicide

For control of certain foliar, stem, and root diseases in turfgrass including golf courses, institutional, commercial and residential lawns, sod farms, sports fields, parks, municipal grounds and cemeteries

Sale, use and distribution of this product in Nassau and Suffolk counties in the State of New York is prohibited.

FLUDIOXONIL 1L TURF is a suspension concentrate containing 1.04 pounds active ingredient per gallon.

#### KEEP OUT OF REACH OF CHILDREN.

# **CAUTION**

See additional precautionary statements and directions for use inside booklet.

FIRST AID					
IF	<ul> <li>Call a 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 by a poison control center or doctor.</li> </ul>				
SWALLOWED					
	Do not give anything by mouth to an unconscious person.				
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 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.				
Have the produc	ct or label with you when calling doctor, poison control or going for treatment.				
	BER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical				
Emergency Ass	istance (Spill, Leak, Fire or Accident) call 1-800-888-8372				

EPA Reg. No. 42750-xxx xxxxxx-xx-xxx

EPA Est. No.

**NET CONTENTS:** 

MANUFACTURED BY: Albaugh, Inc. Ankeny, IA 50021

**ACCEPTED** 

SEP 1 9 2013
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:

EPA. Reg. No: 42750-255

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# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Shoes plus socks

#### **USER SAFETY REQUIREMENTS**

Follow the 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.

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

# USER SAFETY RECOMMENDATIONS

#### Users should:

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

# **ENVIRONMENTAL HAZARDS**

For terrestrial uses: This product is toxic to fish, aquatic invertebrates, and oysters and shrimp. Do not apply directly to water, 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 washwater or rinsate.

## **GROUND WATER ADVISORY**

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

## SURFACE WATER ADVISORY

This chemical may contaminate water through drift of spray in wind. This chemical has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this chemical. A level, well maintained vegetative buffer strip between areas to which this chemical is applied and surface water features such as ponds, streams, and springs, will reduce the potential for contamination of water from rainfall runoff. Runoff of this chemical will be reduced by avoiding applications when conditions favor runoff, such as when soils are saturated and/or significant rainfall is forecast in the next 48 hours. Sound erosion control practices will reduce this chemical's contribution to surface water contamination.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Do not mix or allow coming into contact with oxidizing agent. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

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

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL OR PLANT INJURY.

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

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Long-sleeved shirt and long pants
- · Chemical-resistant gloves made from any waterproof material
- · Shoes plus socks
- Protective eyewear

## NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter treated areas without protective clothing until sprays have dried.

#### USE RESTRICTIONS AND PRECAUTIONS

Sale, use and distribution of this product in Nassau and Suffolk counties in the State of New York is prohibited.

#### RESISTANCE MANAGEMENT

#### **GROUP 12 FUNGICIDE**

FLUDIOXONIL 1L TURF is a protective fungicide used to aid in the control of soil-borne diseases.

FLUDIOXONIL 1L TURF contains fludioxonil which is in the phenylpyrrole class of chemistry and has a unique mode of action, which prevents fungal respiration (Fungicide Action Group 12). Fungal isolates with acquired resistance to Group 12 may eventually dominate the fungal population if Group 12 fungicides are used repeatedly or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by fludioxonil or other Group 12 fungicides. A disease management program that includes alternation or tank mixes between FLUDIOXONIL 1L TURF and other labeled fungicides that have a different mode of action, may prevent pathogen populations from developing resistance. Cultural practices to minimize disease are also recommended to aid in control, as well as to assist in preventing/delaying resistance development.

#### MIXING PROCEDURES

Prepare no more mixture than is needed for the immediate operation. Thoroughly clean the spray equipment before using FLUDIOXONIL 1L TURF. Agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

FLUDIOXONIL 1L TURF Alone: Add 1/3 of the required amount of water to the spray or mixing tank. With the agitator running, add the required amount of FLUDIOXONIL 1L TURF into the spray tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

FLUDIOXONIL 1L TURF + Tank Mixtures: To determine the physical compatibility of FLUDIOXONIL 1L TURF with other products, use a jar test, as described below.

Jar Compatibility Test: Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

To determine biological compatibility with other products, mix the products in the desired proportions, apply per label directions on a small area or small number of plants for phytotoxicity prior to widespread use.

If using FLUDIOXONIL 1L TURF in a tank mixture, observe all directions for use, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix product label. No label dosage rate should be exceeded and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing. Tank mixtures are permitted only in those states where the tank-mix partner is registered.

Add 1/3 of the required amount of water to the spray or mixing tank. With the agitator running, add the required amount of FLUDIOXONIL 1L TURF into the tank. Continue agitation while adding the remainder of the water. Then add the desired amount of other products recommended for tank mixture and allow them to become completely dispersed. Continue agitation to maintain a uniform suspension until all of the spray solution has been applied.

#### **TURFGRASS**

FLUDIOXONIL 1L TURF is a protectant fungicide for control of certain diseases of turfgrass.

FLUDIOXONIL 1L TURF provides control of brown patch, leaf spot, yellow patch, summer patch, anthracnose, gray leaf spot, bentgrass dead spot, and pink and gray snow mold when used in an integrated, preventive disease management program. For control of other diseases of turfgrass such as Pythium blight, and yellow tuft, use Subdue MAXX®.

- 1. Use FLUDIOXONIL 1L TURF as a foliar spray in an integrated, preventive disease management program alone or in combination with other fungicides such as Banner MAXX® II, Subdue MAXX, Daconil®, or Heritage®.
- Apply in sufficient water to ensure thorough coverage.
- 3. Apply after mowing.
- 4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.
- 5. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.
- 6. For optimum turfgrass quality and disease control, use FLUDIOXONIL 1L TURF in conjunction with turfgrass management practices that promote good plant health and optimum disease control.
- 7. Before use of any fungicide, proper diagnosis of the organism causing the disease is important.

  Use of diagnostic kits or other means of identification of the disease is essential to determine the best control measures.

Notes: (1) To avoid possible illegal residues, do not graze animals on treated areas, and, (2) Do not feed clippings from treated areas to livestock or poultry. (3) Note: Do not apply more than 6 fluid ounces of fludioxonil per 1,000 sq. ft. per year on turfgrass.

# Turfgrass Disease Control With FLUDIOXONIL 1L TURF

DISEASE	RATE PRODUCT/ 1,000 SQ.FT.	APPLICATION INTERVAL	INSTRUCTIONS
Brown Patch (Rhizoctonia solani)	0.75 - 1.0 fl. oz.	7 days	Begin applications prior to disease development. For extended and more broad spectrum disease control (up to 21 days), tank-mix with labeled rates of Heritage.
	2.0 fl. oz.	14 days	
Brown Ring Patch (Waitea circinata var. circinata) Rhizoctonia Leaf and Sheath Spot (Waitea circinata var. zeae (Rhizoctonia zeae)	1.0 - 2.0 fl. oz	7 - 14 days	Apply when conditions are favorable for disease development. For best control, use as a component of a preventive disease control program including Heritage and Banner MAXX II.
Bentgrass Dead Spot (Ophiosphaerella agrostis)	1.15 - 2.0 fl. oz.	14 days	Begin applications prior to disease development. For more broad spectrum disease control, tank-mix FLUDIOXONIL 1L TURF with labeled rates of Banner MAXX II.
Anthracnose (Colletotrichum graminicola)	1.0 - 2.0 fl. oz.	14 days	Begin applications prior to disease development. For best control, use as a component of a preventive disease control program including Daconil and Banner MAXX II.

DISEASE	RATE PRODUCT/ 1,000 SQ.FT.	APPLICATION INTERVAL	INSTRUCTIONS
Leaf Spot (Bipolaris spp., Drechslera spp.)	1.0 - 2.0 fl. oz.	14 - 21 days	Apply when conditions are favorable for disease development.
Summer Patch (Magnaporthe poae)	2.0 fl. oz.	14 days	Apply when conditions are favorable for disease development. For best disease control, tank-mix FLUDIOXONIL 1L TURF with labeled rates of Heritage 50WG.
Yellow Patch (Rhizoctonia/Ceratorhiza cerealis)	2.0 fl. oz.	Spring/Fall	Apply when yellow patch rings are first observed in the spring or fall. A second application can be made 14 days later. For best disease control, tank-mix FLUDIOXONIL 1L TURF with labeled rates of Banner MAXX II.
Snow Mold: Gray (Typhula incarnata, Typhula ishikariensis) Pink (Microdochium nivale)	2.0 fl. oz.	Late Fall	Apply one to two applications in late fall before snow cover. Do not apply on top of snow. For best disease control, tank-mix with one to two registered snow mold products. For example, mix with a combination of Banner MAXX II, and Daconil or Concert®. FLUDIOXONIL 1L TURF at 1.0-1.15 fl. oz. rate can be used when tank mixing with Banner MAXX II and Daconil, when disease conditions are expected to be light to moderate.
Microdochium Patch, Fusarium patch (Microdochium nivale, Fusarium spp.)	1.0 - 2.0 fl. oz.	7 - 14 days	For the control of microdochium patch without snow cover. Under heavy infestations combine with Banner MAXX II. Repeat applications can be made at 7- to 14-day intervals when conditions are favorable for disease development.
Gray Leaf Spot (Pyricularia grisea)	1.0 - 2.0 fl. oz.	14 days	Apply when conditions are favorable for disease development. For best control, use as a component of a preventive disease control program.

# STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry, secure place. Do not store this product under wet conditions

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinse water is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

CONTAINER HANDLING [less than or equal to 5 gallons]: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow

begins to drip. Fill the container 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.

CONTAINER HANDLING [greater than 5 gallons]: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

#### CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and 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.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ALBAUGH, INC., or Seller. To the extent permitted by applicable law, Buyer and User agree to hold ALBAUGH, INC. and Seller harmless for any claims relating to such factors.

ALBAUGH, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or ALBAUGH, INC., and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, ALBAUGH, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall ALBAUGH, INC. be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ALBAUGH, INC. 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 ALBAUGH, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ALBAUGH, INC. and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of ALBAUGH, INC.