U.S. ENVIRONMENTAL PROTECTION AGENCY	EPA Reg. Date of Issuance: Number: 100-961
Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460 NOTICE OF PESTICIDE: <u>x</u> Registration Reregistration (under FIFRA, as amended)	Term of Issuance: Conditional Name of Pesticide Product: Meridian 0.33G
Greensboro, NC 27419-8300 Note: Changes in labeling differing in substance from that accepted in connection with it Registration Division prior to use of the label in commerce. In any correspondence on the	이 사이에 가는 것 같아. 지난 것 같아. 이 나에게 가져온 것 같은 것 같아. 나는 것 같아. 가지 않는 것 같아. 나는 것 같아.
On the basis of information furnished by the registrant, the above named pesticide is here Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this p environment, the Administrator, on his motion, may at any time suspend or cancel the re-	roduct by the Agency. In order to protect health and the
Fungicide and Rodenticide Act.	product by the Agency. In order to protect health and the gistration of a pesticide in accordance with the Act. The not to be construed as giving the registrant a right to exclusive with FIFRA sec. $3(c)(7)(A)$ . Once a an ently acceptable. Registration does not be the Agency determines that, at any existing registration, the Agency will $b(2)(B)$ .

Page Two 100-961

2. Under **Personal Protective Equipment** add to the applicators and handlers must wear list "**Protective eye wear**".

3. Also on page 5 under Agricultural Use Requirements add "Wear protective eyewear".

4. On page 6 add "Wear protective eyewear" to the PPE under Agricultural Use Requirement".

5. On page 4 make the following changes to the Limitation of Warranty

- Change the word "**should**" to the word "**must**" in the first sentence of the second paragraph.

-Add "To the extent consistent with applicable law" at the beginning of "Syngenta makes no warranties of merchantability ..."

- Add "To the extent consistent with applicable law" at the beginning of "The exclusive remedy of the user of buyer, and the exclusive liability ..."

6. Submit to the Agency the required one year storage stability (830.6317) and Corrosion characteristics study (830.6320) for the proposed product. It is recommended that the observations are made at 0, 3, 6, 9 and 12 months intervals.

7. Submit two copies of your final printed labeling 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 sect. 6(e). 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:

## (booklet)

# Meridian™ 0.33G

Insecticide

Group 4A Insecticide

For systemic control of insect pests on turfgrasses on golf courses, residential lawns, commercial grounds (i.e., office and shopping complexes, airports), parks, playgrounds, athletic fields and sod farms, and on ornamental plants grown in residential and commercial landscapes, parks, golf courses and interiorscapes

Active Ingredient:	
Thiamethoxam <sup>1</sup>	0.33%
Other Ingredients:	99.67%
Total:	100.0%

<sup>1</sup>CAS No. 153719-23-4

Meridian 0.33G is a granule that contains 0.05 ounces of active ingredient per pound of formulated product.

## KEEP OUT OF REACH OF CHILDREN.

# CAUTION

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-xxxxx

EPA Est. xxxxx

Product of xxxxx Formulated in the USA

SCP xxxxx(draft-Meridian 0.33G rev b)

Net weight

ACCEPTED with COMMENTS In EPA Letter Dated: FEB 2 3 2007

Under the Federal Insecticide, Fungleide, and Rodenticide Act, as amended, for the posticide registered under EPA Reg. No. /(U) - 76/

	FIRST AID
lf in eyes	<ul> <li>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.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
lf on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
•	ct container or label with you when calling a poison control center ing for treatment.
	HOT LINE NUMBER
	Hour Medical Emergency Assistance (Human or Animal) or cal Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

## Personal Protection Equipment Applicators and other handlers must wear:

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

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

# **Engineering Control Statements**

When handlers use closed systems, 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:

- 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.

## **Environmental Hazards**

Do not apply directly to water, or to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

# 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 should 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 SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA 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 SYNGENTA.

# **DIRECTIONS FOR USE**

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

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

# 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.

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:

- Coveralls
- Chemical resistant gloves made of any waterproof material Category A (e.g., barrier laminate, butyl rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride [PVC] or viton)
- Shoes plus socks

# 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 product agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter treated areas without protective clothing until application is complete.

# FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.

#### **GENERAL INFORMATION**

Meridian 0.33G is a broad spectrum insecticide when applied at label rates to turfgrass and soil. It is systemically active against certain foliar (sucking and chewing) and soil pests. Rainfall or irrigation causes the active ingredient of Meridian 0.33G to be released from the granule. Once released, it is readily absorbed by plant foliage or carried into the soil. In the soil, Meridian 0.33G will control soil pests upon contact or ingestion of the active ingredient and is also readily taken up by plant roots. The active ingredient moves upwards in the plant to the site of pest infestation. Through feeding on the plant, pests are exposed to the active ingredient in Meridian 0.33G. Feeding will stop within minutes to hours of exposure and be followed by death of the pest. The moderate persistence of Meridian 0.33G in the soil and foliage also provides long residual control of labeled pests. Meridian 0.33G is not active as an ovicide or as an insect growth regulator.

## **Restrictions:**

- Not for use on production ornamentals or non-bearing fruit and nut trees in nurseries.
- Do not exceed 80 pounds (0.265 lb. ai.) of product per acre per year.
- Do not distribute Meridian 0.33G from the palm of the hand.

# **Resistance Management**

Meridian 0.33G belongs to the neonicotinoid class of chemistry (Group 4A Insecticide) which is not known to be cross-resistant to any other class of insecticide. However, insect pests are known to develop resistance to products used repeatedly. Because resistance development cannot be predicted, the use of Meridian 0.33G should conform to sound resistance management strategies established for the crop and use area. Strategies should include rotation of chemicals with different modes of action, limitation of the number of successive generations of the target pest being treated with the same compound, and adherence to labeled directions.

Consult your local pest control advisor or extension office for additional methods for preventing resistance development. Novartis encourages responsible product stewardship to ensure effective long-term control of the insect pests on this label.

# **APPLICATION TO TURF**

#### **Sites of Application**

Meridian 0.33G can be used for applications to turfgrasses on golf courses, residential lawns, commercial grounds (i.e., office and shopping complexes, airports), parks, playgrounds, athletic fields and sod farms.

#### **Application Methods**

Apply Meridian 0.33G as a broadcast application to turfgrass for control of targeted pests. With calibrated granular equipment, uniformly broadcast Meridian 0.33G over the area being treated. Irrigation or rainfall is recommended within seven days of preventive treatments and one day of curative treatments to move Meridian 0.33G into the root zone where grubs feed. Adequate soil moisture before and after application should be maintained for optimum control and healthy turfgrass growth. Excessively wet or dry conditions may impact the performance of Meridian 0.33G against white grubs and mole crickets and thus these extremes should be avoided when using this product. Avoid mowing the turf until the treated area has been irrigated or rainfall has occurred to allow for maximum and uniform uptake into the turfgrass or soil.

#### **Application Timing**

Meridian 0.33G is effective at labeled rates when applied as a preventive and curative treatment against white grubs. As a preventive treatment, Meridian 0.33G may be applied up to 45 days before the historical peak of adult flight for the targeted species. As a curative grub treatment, make the application from egg hatch to 2<sup>nd</sup> instar (grubs less than half their full size). For optimum white grub control, apply Meridian 0.33G from peak adult flight through peak egg hatch of the primary species being targeted. For suppression of mole crickets apply Meridian 0.33G preventively from first to peak egg hatch of the generation being targeted. For suppression of Chinch bugs, apply Meridian 0.33G when young nymphs are first observed. Do not exceed a total of 80 pounds of Meridian 0.33G per acre per year.

# **Recommendations for Use on Turfgrass**

•

Use sites include turfgrass on golf courses, residential lawns, commercial grounds (i.e., office and shopping complexes, airports), parks, playgrounds, athletic fields, and sod farms.

Pests	Dosage of Meridian 0.33G	Remarks
Larvae (white grubs) of: Japanese beetle (Popillia japonica) Northern masked chafer (Cyclocephala borealis) Southern masked chafer (C. immaculate or C. lurida) European chafer (Rhizotrogus majalis) May or June beetle (Phyllophaga species) Asiatic garden beetle (Maladera castanea) Oriental beetle (Exomala orietalis) Green June beetle (Cotinus nitida) Black turfgrass ataenius (Ataenius spretulus) Billbugs (Sphenophorus species)	60 - 80 lb./A or 7.1 - 9.4 lb./5,000 sq. ft.	<ul> <li>Application Timing:</li> <li>Apply up to 45 days before the historical peak of adult flight to 2<sup>nd</sup> instar grub of the species being targeted.</li> <li>For optimum control, treat from peak flight to peak egg hatch.</li> </ul>
Suppression of <b>Mole crickets</b> (Scapteriscus species)	60 - 80 lb./A or 7.1 - 9.4 lb./5,000 sq. ft.	To reduce mole cricket damage, treat from first egg hatch to peak egg hatch.
Suppression of <b>Chinch bugs</b> ( <i>blissus</i> species)	60 - 80 lb./A or 7.1 - 9.4 lb./5,000 sq. ft.	Apply when young nymphs are first observed. See note below.

For specific information about developmental stages of the target pest and optimal timing of applications, consult with your State Cooperative Extension Service.

**Note:** For turf with heavy thatch (more than 0.75"), use the higher rates within the recommended rate range. Do not exceed 80 pounds of Meridian 0.33G per acre per year. Meridian 0.33G is safe (i.e., not phytotoxic) for use on all major turfgrass species.

**Note:** Meridian 0.33G provides suppression of mole crickets and chinch bug populations on turfgrass. Suppression can mean either erratic control, ranging from good to poor, or a consistent level of control below that generally acceptable for commercial purposes.

Please refer to additional comments under General Information section relating to turfgrass applications.

•

#### -10-

#### **Application to Interiorscape and Landscape Plants**

#### Sites of Application

Meridian 0.33G can be applied to ornamentals grown in residential and commercial landscapes, parks, golf courses and interiorscapes.

#### **Application Methods**

Meridian 0.33G is active as a soil and systemic insecticide when applied to the soil or soilless media. To apply, use calibrated granular equipment that uniformly broadcasts Meridian 0.33G to the desired area.

#### **Application Timing**

Meridian 0.33G must move to the site of pest infestation, such as in the root zone or the above-ground portion of the host plant. With irrigation or rainfall, move Meridian 0.33G into the root zone of plants or the location of soil-dwelling pests. Watering-in should occur within 3 days of treatment, and optimally within 24 hours. Meridian 0.33G is readily taken-up by the roots and moves upwards in the plant to feeding sites of pests. Systemic activity of Meridian 0.33G may be delayed for one or more weeks depending on plant size, rate of uptake from the soil and rate of translocation within the plant. Systemic activity in large plants may require several weeks before control of stem and foliar pests is achieved. If economic thresholds for target pests are low, or plants are historically damaged, Meridian 0.33G should be applied preventively (before pests are evident) to the growing media.

Repeat applications of Meridian 0.33G as needed, but no sooner than every 7 days and do not exceed a total of 80 pounds per acre per year.

# **Recommendations for Applications to Ornamental Plants**

For plants grown in residential and commercial landscapes, parks, golf courses and interiorscapes.

Pests	Dosage of Meridian 0.33G	Remarks
Aphids Mealybugs Whiteflies	27 - 80 lb./A or 3.2 - 9.4 lb./5,000 sq. ft.	Apply to the soil preventively in situations where tolerance of insects or damage is low. Allow a minimum of one week for smaller plants to translocate Meridian 0.33G to feeding sites of the target pest. Note: If leaching, wait a minimum of 7 days after application to allow for maximum uptake of Meridian 0.33G by the plant's root system.
Larvae (white grubs) of: Japanese beetle (Popillia japonica)	60 - 80 lb./A or 7.1 - 9.4 lb./5,000 sq. ft.	Application timing: Apply up to 45 days before the historical peak of adult flight to 2 <sup>nd</sup> instar grub of the species being
Northern masked chafer (Cyclocephala borealis) Southern masked chafer (C. immaculate or C. lurida)		targeted. For optimum control, treat from peak flight to peak egg hatch. Note: If leaching, wait a minimum
European chafer <i>(Rhizotrogus majalis)</i> May or June beetle <i>(Phyllophaga</i> species)		of 7 days after application to allow for maximum uptake of Meridian 0.33G by the plant's root system.
Asiatic garden beetle <i>(Maladera castanea)</i> Oriental beetle		
(Exomala orietalis) Green June beetle (Cotinus nitida)		
Black turfgrass ataenius (Ataenius spretulus)		
Billbugs (Sphenophorus species) Aphodius species		

**Note:** Do not exceed 80 pounds per acre per crop or year, whichever is shorter, when making applications to the soil for ornamentals.

For specific information about developmental stages of the target pest and optimal timing of applications, consult with your State Cooperative Extension Service.

Please refer to additional comments under General Information section relating to turfgrass applications.

#### STORAGE AND DISPOSAL

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

#### Storage

Store in a cool, dry place.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup, procedures and disposal of wastes. In the event of a major spill, fire, or other emergency call 1-800-888-8372, day or night.

#### **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of unused pesticide is a violation of Federal law. If these wastes cannot be used according to label instruction, 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 Disposal**

Completely empty the bag into granular application equipment. Then dispose of the empty bag by depositing in a sanitary landfill, or by other procedures allowed by state and local ordinances.

Meridian<sup>™</sup> and the Syngenta logo are trademarks of a Syngenta Group Company ©2006 Syngenta

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCP xxxxx-L(draft-Meridian 0.33G rev b)

Meridian 0.33G (draft rev b)-lg-6-2-06 000100-xxxxx.19991014b.Meridian33G.pdf

#### (non-detachable container label)

Meridian<sup>™</sup> 0.33G Insecticide

For systemic control of insect pests on turfgrasses on golf courses, residential lawns, commercial grounds (i.e., office and shopping complexes, airports), parks, playgrounds, athletic fields and sod farms, and on ornamental plants grown in residential and commercial landscapes, parks, golf courses and interiorscapes

Active Ingredient:	
Thiamethoxam <sup>1</sup>	
Other Ingredients:	99.67%
Total:	100.0%

# <sup>-1</sup>CAS No. 153719-23-4

Meridian 0.33G is a granule that contains 0.05 ounces of active ingredient per pound of formulated product.

#### **KEEP OUT OF REACH OF CHILDREN.**

#### CAUTION

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-xxxxx EPA Est. xxxxx

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

# 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 product agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter treated areas without protective clothing until application is complete.

SCP xxxxx-L(draft-Meridian 0.33G rev b)

Net weight

# -15-

# **PRECAUTIONARY STATEMENTS**

# Hazards to Humans and Domestic Animals

# CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

	FIRST AID
If in eyes	<ul> <li>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.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
lf on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Have the produc or doctor, or goir	t container or label with you when calling a poison control center g for treatment.
	HOT LINE NUMBER
	bur Medical Emergency Assistance (Human or Animal) or al Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372

#### **Environmental Hazards**

Do not apply directly to water, or to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

# STORAGE AND DISPOSAL

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

#### Storage

Store in a cool, dry place.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup, procedures and disposal of wastes. In the event of a major spill, fire, or other emergency call 1-800-888-8372, day or night.

## Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide is a violation of Federal law. If these wastes cannot be used according to label instruction, 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 Disposal**

Completely empty the bag into granular application equipment. Then dispose of the empty bag by depositing in a sanitary landfill, or by other procedures allowed by state and local ordinances.

Meridian<sup>™</sup> and the Syngenta logo are trademarks of a Syngenta Group Company ©2006 Syngenta Protection

Manufactured for: Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCPxxxxx-L(draft-Meridian 0.33G rev b)

Meridian 0.33G(draft rev b)-lg-6-2-06 000100-xxxxx.19991014b.Meridian33G.pdf