

432-1351

11/7/2003

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Bayer Environmental Science

# Merit<sup>®</sup> 0.4 Plus Turf Fertilizer

<b>ACCEPTED</b>
NOV 7 2003
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide Registered under EPA Reg. No. 432-1351

For fertilization and insect control in turfgrass and landscape ornamentals.

Fertilizer with MERIT Insecticide.

**ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine .....0.4%

**OTHER INGREDIENTS:** ..... 99.6%

100.0%

EPA Reg. No. 432-1351

EPA Est. No. \_\_\_\_\_

**STOP - Read the label before use.**

**Keep out of reach of children.**

## CAUTION

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

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

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

### FIRST AID

**If swallowed:**

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**On skin or clothing:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

**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 product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment.

**Note To Physician:** No specific antidote is available. Treat the patient symptomatically

## ENVIRONMENTAL HAZARDS

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

# DIRECTIONS FOR USE

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

**Do not formulate this product into other end-use products.**

## APPLICATION TO TURFGRASS

The use of this product will provide plant nutrients as well as providing control of selected insect pests. MERIT 0.4 Plus Turf Fertilizer can be used for the control of soil inhabiting pests of turfgrass, such as Northern & Southern masked chafers, *Cyclocephala borealis*, *C. immaculata*, and/or *C. lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotrogus majalis*; May or June beetles, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis*; Billbugs, *Sphenophorus* spp.; Annual bluegrass weevil, *Hyperodes* spp.; Black turfgrass ataeenius, *Ataenius spretulus*; *Aphodius* spp.; European Crane Fly *Tipula paludosa*; and mole crickets, *Scapteriscus* spp. MERIT 0.4 Plus Turf Fertilizer can be used as directed on turfgrass in sites such as home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, and athletic fields. MERIT 0.4 Plus Turf Fertilizer cannot be used on commercial sod farms.

## RECOMMENDED APPLICATION RATES

CROP	PEST	DOSAGE
		MERIT + TURF FERTILIZER
Turf Grasses	Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass ataeenius European chafer	European Crane Fly Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer
	Larvae of: Asiatic garden beetle Black turfgrass ataeenius European chafer European Crane Fly	Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer
	Larvae of: Annual bluegrass weevil Billbugs	75 to 100 lb per acre or 1.75 to 2.25 lb per 1000 sq ft
	For optimum control, make application prior to egg hatch of the target pest. Be sure to read "APPLICATION EQUIPMENT" Section of this label.	
	Mole crickets	100 lb per acre or 2.25 lb per 1000 sq ft
	For control of mole crickets make application prior to or during the peak egg hatch period. When adults or large nymphs are present and actively tunneling, MERIT application should be accompanied by a curative insecticide.	

Consult your local State Agricultural Experiment Station, or State Extension Turf Specialists for more specific information regarding timing of application.

**NOTE:** For optimum control, irrigation or rainfall should occur within 24 hours after application to move the active ingredient through the thatch. On golf courses, irrigate treated areas following application. Do not apply more than 100 lb (0.4 lb of active ingredient) per acre per year. Avoid mowing turf or lawn area until after irrigation or rainfall has occurred so that uniformity of application will not be affected.

The active ingredient in MERIT 0.4 Plus Turf Fertilizer has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Optimum control will be achieved when applications are made prior to egg hatch of the target pest, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Applications should not be made when turfgrass areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated turf must be in such a condition that the rainfall or irrigation will penetrate vertically into the soil profile. Applications cannot exceed a total of 100 lb (0.4 lb of active ingredient) per acre per year.

**APPLICATION TO ORNAMENTALS**

MERIT 0.4 Plus Turf Fertilizer can be used as a broadcast application on ornamentals in commercial and residential landscapes, as well as on landscaped areas of golf courses and other recreational areas. This is a systemic product, with the active ingredient being absorbed by the roots and translocated upward within the plant. Optimum control will be achieved when applications are followed by sufficient mechanical incorporation, irrigation or rainfall to place the active ingredient into the soil. Application should be made prior to anticipated pest infestation to achieve optimum levels of control.

Applications of MERIT 0.4 Plus Turf Fertilizer cannot exceed a total of 100 lb (0.4 lb of active ingredient) per acre per year.

**NOTE: Not for use in commercial greenhouses, or nurseries, or on sod farms.**

**RECOMMENDED APPLICATION RATES FOR USE ON ORNAMENTALS**

CROP	PEST	DOSAGE
		MERIT + TURF FERTILIZER
Landscape Plantings Including: Trees, Shrubs, Evergreens, Flowers, Foliage, Plants, Ground Covers	White grub larvae Such as : Japanese beetle larvae, Chafers, <i>Phyllophaga</i> spp. Asiatic garden beetle, Oriental beetle	1.75 to 2.25 lb per 1000 sq ft

Apply as a broadcast treatment. Prior to application, remove black plastic or other weed barrier material that will not permit water permeability.

**NOTE:** For optimum control, mechanical incorporation, irrigation or rainfall should occur within 24 hours after application to move the active ingredient into soil.

Refer to label sections on application equipment and spreader settings.

**APPLICATION EQUIPMENT**

Apply MERIT 0.4 Plus Turf Fertilizer uniformly over the area being treated with typical granular application equipment. Both drop-type and rotary-type spreaders may be used to apply MERIT 0.4 Plus Turf Fertilizer. Avoid the use of spreaders which would apply the material in narrow, concentrated bands. Calibrate application equipment prior to use according to the manufacturer's directions. Check frequently to be sure equipment is working properly and distributing granules uniformly and accurately.

**SPREADER SETTINGS FOR MERIT 0.4 PLUS TURF FERTILIZER**

The following chart can be used as a guide in establishing an accurate rate of MERIT 0.4 Plus Turf Fertilizer. The suggested settings should provide an application rate of 1.75 lb per 1000 sq ft, or 75 lb per acre. Application rates will vary dependent upon speed, equipment wear and condition of spreader. Carefully calibrate all equipment used prior to commercial use of this product.

(Chart to Come)

**RESTRICTIONS**

Avoid runoff or puddling of irrigation water following application. Avoid application of MERIT 0.4 Plus Turf Fertilizer to areas which are water-logged or saturated, which will not allow penetration into the root zone of the plant. Do not apply more than 100 lb (0.4 lb of active ingredient) per acre per year. Do not apply to vegetable gardens.

**STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If material is spilled for any reason or cause, carefully contain any spilled material to prevent non-target contamination. Do not walk through spilled material and dispose of as directed for pesticides above.

Refer to Precautionary Statements on label for hazards associated with the handling of this material. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer Environmental Science Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer Environmental Science Emergency Response Telephone No. is 1-800-334-7577 or contact Chemtrec at 800-424-9300.

**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:** Completely empty bag into application equipment. Dispose of empty bag in a sanitary landfill or by incineration or if allowed by the state and local authorities, by burning. If burned, stay out of smoke.

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**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product.

If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However, because of manner of use and other factors beyond Bayer Environmental Science's control it is impossible for Bayer Environmental Science to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** BAYER ENVIRONMENTAL SCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer Environmental Science is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. Bayer Environmental Science disclaims any liability whatsoever for special, incidental or consequential damages, resulting from the use or handling of this product.

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Reason For Revision: Bayerized label, Updated EPA No, First Aid Statements, Warranty Statements and Phone No., and added European Crane Fly, 8/03

NET CONTENTS: \_ Pounds

