



PM-19

Reg # 3125-481

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	<p>U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460</p> <p><b>NOTICE OF PESTICIDE:</b> <u>  X  </u> Registration <u>     </u> Reregistration</p> <p>(under FIFRA, as amended)</p>	EPA Reg. Number:  3125-481	Date of Issuance:  <b>SEP 01 1995</b>
		Term of Issuance:	
		Name of Pesticide Product:  Merit 0.45 Plus Turf Fertilizer	
Name and Address of Registrant (include ZIP Code):  Bayer Corporation P.O. Box 4913 8400 Hawthorn Road Kansas City, MO 64120-0013			
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/reregistration 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.  Add the phrase EPA Registration No. "3125-481" to your label before you release the product for shipment.			
Signature of Approving Official:    Dennis H. Edwards, Jr., Product Manager 19 Insecticide Branch Rodenticide Branch Registration Division (H7505C)		Date:  <b>SEP 01 1995</b>	

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EPA Reg. No. 3125-481

Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Sincerely,

DHE

Dennis H. Edwards, Jr.  
Product Manager (19)  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

Enclosure

# Merit 0.45 Plus Turf Fertilizer

XXX-8409.YLD

5487742

U.S. LABEL

Base Pre-Reg. (8409)

396

Reason to Issue: To propose registration of new formulation.

Date of Draft: 04/19/95(Pre-Reg)(S)

## Merit<sup>®</sup> 0.45 Plus Turf Fertilizer

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 ..... 0.45%  
INERT INGREDIENTS ..... 99.55%  
100.0%

EPA File Symbol No. 3125-XXX

NET CONTENTS: \_\_\_ Pounds

**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.

### STATEMENTS OF PRACTICAL TREATMENT

**If swallowed:** Call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. If syrup of ipecac is available, administer 1 tablespoonful (15 ml) of syrup of ipecac followed by 1 to 2 glasses of water. If vomiting does not occur within 20 minutes, repeat the dose once. Do

not induce vomiting or give anything by mouth to an unconscious person. **If on skin:** Wash thoroughly with soap and water. Get medical attention if irritation occurs. **If in eyes:** Hold eyelids open and flush with plenty of water. Call a physician if irritation persists.

**TO PHYSICIAN:** No specific antidote is available. Treat the patient symptomatically.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

SEP 01 1995

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

3125-481

## 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.

**IMPORTANT:** Read these entire DIRECTIONS FOR USE, GENERAL INFORMATION, AND CONDITIONS OF SALE before using MERIT 0.45 Plus Turf Fertilizer.

**CONDITIONS OF SALE:** THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE APPROPRIATE FOR THE CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED UNDER DIFFERENT ENVIRONMENTAL CONDITIONS BOTH INDOORS AND OUTDOORS UNDER CONDITIONS SIMILAR TO THOSE THAT ARE ORDINARY AND CUSTOMARY WHERE THE PRODUCT IS TO BE USED. INSUFFICIENT CONTROL OF PESTS OR PLANT INJURY MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL CONDITIONS, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO ANIMALS, MAN, AND DAMAGE TO THE ENVIRONMENT. BAYER OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL ENVIRONMENTAL CONDITIONS, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF BAYER AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

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 0.45 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.; Elack turfgrass atenius, *Ataenius spretulus*; *Aphodius* spp.; and mole crickets, *Scapteriscus* spp. MERIT 0.45 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 0.45 Plus Turf Fertilizer cannot be used on commercial sod farms.

The active ingredient in MERIT 0.45 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 90 lb (0.4 lb of active ingredient) per acre per year.

### APPLICATION TO ORNAMENTALS

MERIT 0.45 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 0.45 Plus Turf Fertilizer cannot exceed a total of 90 lb (0.4 lb of active ingredient) per acre per year.

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

### APPLICATION EQUIPMENT

Apply MERIT 0.45 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 0.45 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.

## DIRECTIONS FOR USE (CONTINUED)

## SPREADER SETTINGS FOR MERIT 0.45 PLUS TURF FERTILIZER

The following chart can be used as a guide in establishing an accurate rate of MERIT 0.45 Plus Turf Fertilizer. The suggested settings should provide an application rate of

1.6 lb. per 1000 sq ft, or 70 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)

RECOMMENDED APPLICATION RATES			
CROP	PEST	DOSAGE MERIT + TURF FERTILIZER	REMARKS
Turf Grasses	Larvae of: Japanese beetle Black turfgrass ateenius Northern masked chafer Southern masked chafer European chafer Oriental beetle Asiatic garden beetle <i>Phyllophaga</i> spp. Billbugs Annual bluegrass weevil	55 to 90 lb per acre  or  1.33 to 2.0 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.
	Larvae of: Japanese beetle Black turfgrass ateenius Northern masked chafer Southern masked chafer European chafer Oriental beetle Asiatic garden beetle <i>Phyllophaga</i> spp.	70 lb per acre  or  1.6 lb per 1000 sq ft	
	Larvae of: Billbugs Annual bluegrass weevil	70 to 90 lb per acre  or  1.6 to 2.0 lb per 1000 sq ft	
	Mole crickets	90 lb per acre  or  2.0 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 90 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.			

## DIRECTIONS FOR USE (CONTINUED)

RECOMMENDED APPLICATION RATES FOR USE ON ORNAMENTALS			
CROP	PEST	DOSAGE MERIT + TURF FERTILIZER	REMARKS
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)	1.6 to 2.0 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.  <b>NOTE:</b> 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.

## RESTRICTIONS

Avoid runoff or puddling of irrigation water following application. Avoid application of MERIT 0.45 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 90 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 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.

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 Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer Kansas City Emergency Response telephone number is 816-242-2582, or contact Chemtrec at 800-424-9300.

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