



PM04

325-451

9/30/98

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	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505C) 477 "M" St., S.W. Washington, D.C. 20460	EPA Reg. Number 3125-451	Date of Issuance SEP 30 1998
		Term of Issuance Unconditional	
		Name of Pesticide Product Merit 0.5 G Insecticide	
NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Reregistration			
(under FIFRA, as amended)			
Name and Address of Registrant (include ZIP Code) Bayer Corporation P.O. Box 4913 8400 Hawthorne Road Kansas City, MO 64120-0013 Attn: John S. Thornton			
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.			
<p>This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5). 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 the existing registration, the Agency will require submission of such data under FIFRA section (3)(c)(2)(B).</p> <p>This product was initially issued a conditional registration on March 18, 1994 pending submission and review of additional required data. The specific data requirements were listed in our Notice of Conditional Registration. Our records indicate that all of the required data have subsequently either been submitted and accepted, or the data requirement has been waived. Copies of the data reviews and conclusions were sent to you previously. The provisions of your conditional registration have been met.</p>			
Signature of Approving Official 		Date SEP 30 1998	

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A stamped copy of the product label is enclosed for your records. If you have any questions regarding this Notice, please call me at (703) 305-5417 or (703) 305-5404.

Sincerely yours,



Peg Perreault
Chemical Manager, Team 4
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure (1)

Merit 0.5 G

451-8929.BLD

U.S. LABEL

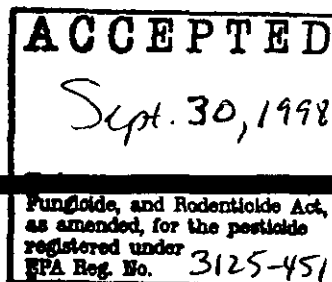
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Base Reg (8929)

Reason to Issue: To add cutworm suppression and to allow a rate range on turfgrass pests.

Date of Draft: 03/17/97 (S)
Supercedes Draft Dated: 03/14/95

Merit® 0.5 G

Insecticide



For systemic insect control in turfgrass and landscape ornamentals.

ACTIVE INGREDIENT:

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine 0.5%

INERT INGREDIENTS 99.5%
100.00%

EPA Reg. No. 3125-451

Net Contents: 30 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.

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 0.5 G Insecticide.

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 in other end-use products.

GENERAL INFORMATION

APPLICATION TO TURFGRASS

MERIT 0.5 G Insecticide 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 ataenius, *Ataenius spretulus*; *Aphodius* spp.; and Mole crickets, *Scapteriscus* spp. MERIT 0.5 G Insecticide can also be used for the suppression of cutworms in turfgrass areas. MERIT 0.5 G Insecticide 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 Insecticide can not be used on commercial sod farms.

The active ingredient in MERIT 0.5 G Insecticide 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 in the soil profile. Applications cannot exceed a total of 80 lb (0.4 lb of active ingredient) per acre per year.

APPLICATION TO ORNAMENTALS

MERIT 0.5 G Insecticide can be used as a broadcast application on ornamentals in commercial and residential landscapes. MERIT 0.5 G is a systemic product and will be translocated upward within the plant system. Optimum control will be achieved when applications are followed by sufficient mechanical incorporation, irrigation or rainfall to move the active ingredient into the soil. Applications should be made prior to anticipated pest infestation to achieve optimum levels of control.

Applications of MERIT 0.5 G Insecticide cannot exceed a total of 80 lb (0.4 lb of active ingredient) per acre per year.

NOTE: Not for use in commercial greenhouses, nurseries, on sod farms or on grass grown for seed. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior landscapes, ornamental gardens or parks, or on golf courses or lawns and grounds.

APPLICATION EQUIPMENT

Apply MERIT 0.5 G Insecticide uniformly over the area being treated with normally used granular application equipment. Both drop-type and rotary-type spreaders may be used to apply MERIT 0.5 G Insecticide. 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 0.5 G Insecticide

The following chart can be used as a guide in establishing an accurate rate of MERIT 0.5 G Insecticide. Application rates will vary depending upon speed, equipment wear and condition of spreader. Carefully calibrate application equipment prior to commercial use of this product.

SPREADER	SPEED (mph)	SETTINGS		SPREADER	SPEED (mph)	SETTINGS	
		60 lb/A	80 lb/A			60 lb/A	80 lb/A
Cyclone Model CB4000	3	3-1/4	3-1/2	PSB Prizelawn CBR-II	3	3-1/4	3-1/2
Earthway Drop	3	9	10	Scott's Proturf R-8A	3	H	I
Earthway 10' Rotary	3	11	12	Scott's Proturf SR-1	3	H	I
Gandy Turf Tender 24"	3	16	19	Scott's PF-1, PF-2, PF-3, PF-4 Drop	3	4	4-1/2
Gandy Turf Tender 42"	3	21	23	Scott's SS-1 Drop	3	4	4-1/2
Lely	4.5	3.5	-	Spyker Model 34	3	3.1	3.2
Lesco Model 6000	3	B 1/2	C	Vicon Model PS-203	4.5	13	16

RECOMMENDED APPLICATIONS

CROP	PEST	DOSAGE MERIT 0.5 G	REMARKS
Turfgrasses	Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass atenioides Cutworms (suppression) European chafer Japanese beetle Northern masked chafer Oriental beetle Phyllophaga spp. Southern masked chafer	50 to 80 lb per acre or 1.2 to 1.8 lb per 1000 sq ft	For optimum control of grubs, billbugs and annual bluegrass weevil, make application prior to egg hatch of the target pest. Be sure to read "APPLICATION EQUIPMENT" Section of this label.
	Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass atenioides Cutworms (suppression) European chafer Japanese beetle Northern masked chafer Oriental beetle Phyllophaga spp. Southern masked chafer	60 to 80 lb per acre or 1.4 to 1.8 lb per 1000 sq ft	
	Mole crickets	80 lb per acre or 1.8 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 80 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.

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RECOMMENDED APPLICATIONS FOR USE ON ORNAMENTALS			
For use only in and around industrial and commercial buildings and residential areas.			
CROP	PEST	DOSAGE MERIT 0.5 G	REMARKS
Landscape Plantings (including trees, shrubs, evergreens, flowers, foliage plants, and ground covers)	White grub larvae (such as Japanese beetle larvae, Chafers, <i>Phyllophaga</i> spp. Asiatic garden beetle, Oriental beetle)	1.4 to 1.8 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.

RESTRICTIONS

Avoid runoff or puddling of irrigation water following application. Avoid application of MERIT 0.5 G Insecticide to areas which are waterlogged or saturated, which will not allow penetration into the root zone of the plant. Do not apply

more than 80 lb (0.4 lb of active ingredient) per acre per year. Do not plant any food crop within one year of a treatment with MERIT 0.5 G Insecticide.

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, 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 800-414-0244 or contact Chemtrec at 800-424-9310.