



Bayer Environmental Science

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%

OTHER INGREDIENTS: 99.5%

100.0%

*Protected by U.S. Patent No. 4,742,060

EPA Reg. No. 432-1328

EPA Est. No. ____

**STOP - Read the label before use.
Keep out of reach of children.**

CAUTION

FIRST AID

If swallowed	<ul style="list-style-type: none"> • 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.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 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.

In case of emergency call toll free the Bayer Environmental Science Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

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

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.

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.

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 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.

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*; Green June beetle, *Cotinis nitida*; May or June beetles, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis*; Billbugs, *Spherophorus* spp.; Annual bluegrass weevil, *Hyperodes* spp.; Black turfgrass ataeenius, *Ataenius spretulus*; *Aphodius* spp; European Crane Fly *Tipula paludosa*; and Mole crickets, *Scapteriscus* spp. MERIT 0.5 G Insecticide can also be used for the suppression of cutworms and chinchbugs 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 cannot 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 plantscapes, 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.

RECOMMENDED APPLICATIONS		
CROP	PEST	DOSAGE MERIT 0.5 G
Turfgrasses	Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass ataenius Cutworms (suppression) European chafer	European Crane Fly Green June beetle Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer
	60 to 80 lb per acre or 1.4 to 1.8 lb per 1000 sq ft	
	For optimum control of grubs, billbugs, European crane fly and annual bluegrass weevil, make application prior to egg hatch of the target pest. Be sure to read "APPLICATION EQUIPMENT" Section of this label.	
	Chinch bug (suppression)	Mole crickets
For suppression of chinchbugs, make application prior to the hatching of the first instar nymphs. 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.		

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
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.		

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

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.

Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.

For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval should be observed.

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.

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