

Merit 1 G G&N

452-8870a.YLD

U.S. LABEL

Base Pre-Reg. (8870)

Reason to issue: To revise use directions. 09/25/96
Draft: To present label in finished format and
change Emergency Phone Number.

Date of Draft: 09/25/96 (S)
Supersedes Pre-Reg Dated: 07/18/96

Merit 1 G

Greenhouse and Nursery Insecticide

ACCEPTED
Sept. 30, 1998
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under 3125-452
EPA Reg. No. 1.0%

For systemic insect control in ornamental crops.

ACTIVE INGREDIENT:

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

INERT INGREDIENTS

99.0%
100.0%

EPA Reg. No. 3125-452

Net Contents: ___ Ounces

STOP - Read The Label Before Use
KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a
alguien para que se la explique a usted en
detalle.

(If you do not understand the label, find
someone to explain it to you in detail.)

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.

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.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Water-proof gloves
- Shoes plus socks

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

Engineering controls statements:

- When handlers use closed systems,
enclosed cabs, or aircraft in a manner that
meets the requirements listed in the Worker

User Safety Recommendations:

User 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.
- Remove PPE immediately after handling
this product. Wash the outside of gloves
before removing. As soon as possible,
wash thoroughly and change into clean
clothing.

STATEMENTS OF PRACTICAL TREATMENT:

If in eyes: Hold eyelids open and flush with
plenty of water. Call a physician if irritation
persists. **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, 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.

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 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.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves

AGRICULTURAL USE REQUIREMENTS continued

contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

IMPORTANT: Read these entire DIRECTIONS FOR USE, GENERAL INFORMATION, AND CONDITIONS OF SALE before using MERIT 1 G Greenhouse and Nursery 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.

GENERAL INFORMATION

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MERIT 1 G Greenhouse and Nursery Insecticide is for insect control on ornamental plants in nurseries and greenhouses. MERIT 1 G Greenhouse and Nursery Insecticide is a systemic product and will be translocated upward within the plant. To assure optimum effectiveness, the product must be placed by incorporation where the roots of the plant can absorb the active ingredient. Irrigate moderately but thoroughly after application, allowing no leaching and runoff from containers for at least three irrigations or 10 days whichever is longer.

INCORPORATION

Incorporation of MERIT 1 G Greenhouse and Nursery Insecticide can be achieved by cultivation, irrigation, rainfall, mechanical placement or by using mechanical soil or media mixing equipment.

WOODY PERENNIALS

Onset of protection is slower than in herbaceous species. A delay of 2 or more weeks should be expected. Longer delays may be expected with larger plants. Application should

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therefore be made in advance of expected insect activity.

BARK MEDIA

Media with 30% or more bark content when treated with MERIT 1 G Greenhouse and Nursery Insecticide may confer a shorter period of protection.

For systemic insect control in field-grown nursery stock, and indoor and outdoor ornamentals grown in flats, benches, beds and containers.							
PEST	USE PATTERN	DOSAGE					REMARKS
		Container size (inches)	Bulk Application		Topical Application		
			Pots/cu. yd. of mix	Bulk Rate lbs/cu.yd.	Topical Rate level teaspoon	Grams/pot	
Adelgids Aphids Thrips (suppression)* Whiteflies	Herbaceous Species (one or two plants per pot)	2.0 to 3.0 3.5 to 5.0 5.5 to 7.0 8.0 to 10.0 11.0 to 12.0	4500 to 3200 1600 to 1300 900 to 400 200 to 160 80 to 60	7.0 to 3.5 3.9 to 3.0 1.8 to 1.2 1.0 to 0.8 0.8 to 0.5	1/8 to 1/4 1/4 to 1/3 1/3 to 1/2 1/2 to 2/3 2/3 to 1	0.5 to 1.0 1.0 to 1.4 1.4 to 2.0 2.0 to 2.7 2.7 to 4.1	<u>Bulk Rate Application:</u> Mix the required amount of MERIT 1 G Greenhouse and Nursery Insecticide per cubic yard of medium. Mix thoroughly before filling pots and transplanting. <u>Topical Application:</u> May be made at transplanting, repotting, or on established containerized plants. Irrigate moderately after application to move the active ingredient into the root zone. Do not allow significant leaching and runoff for at least 3 irrigations or 10 days, whichever is longer.
	Woody Perennial Species (Three or more plants per pot)	2.0 to 3.0 3.5 to 5.0 5.5 to 7.0 8.0 to 10.0 11.0 to 12.0	4500 to 3200 1600 to 1300 900 to 400 200 to 160 80 to 60	9.0 to 7.0 6.0 to 4.0 2.5 to 2.0 1.5 to 1.0 1.0 to 0.8	1/4 to 1/3 1/3 to 1/2 1/2 to 2/3 2/3 to 1 1 to 1-1/2	1.0 to 1.3 1.3 to 2.0 2.0 to 2.7 2.7 to 4.1 4.1 to 6.1	
		Ornamenta crops grown in flats, benches, or beds	Apply 15 ounces per 1000 sq ft				
* Feeding on foliage only. Thrips in buds and flowers will not be suppressed.							
1 level tsp of MERIT 1 G = 4.1 grams							

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		Container size	Bulk Application		Topical Application		
			Pots/cu.yd. of mix	Bulk Rate lbs/cu.yd.	Level tsp/pot	Grams/pot	
Japanese Beetle Lacebugs Leafminers Mealybugs Root Weevil Complex (such as Black Vine Weevil, Apopka Weevil, Citrus Root Weevil)* Scale insects White Grub larvae (such as Japanese Beetle, Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle) * For use on non-bearing citrus nursery stock	Containerized Plants	1 Gallon 2 Gallon 3 Gallon 5 Gallon	260 to 230 125 to 100 70 to 60 50 to 30	5.0 to 2.5 4.4 to 2.2 3.3 to 1.7 2.0 to 1.0	1-1/4 to 2-1/2 2-1/2 to 5.0 3-2/3 to 7-1/3 4-1/2 to 9.0 3 teaspoons = 1 tablespoon	5.0 to 10.0 10.0 to 20.0 15.0 to 30.0 18.5 to 37.0	For optimum control, make applications prior to egg hatch of the target pest. Irrigate moderately after application to move the active ingredient into the root zone.
White grub larvae (such as Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	Field and Forest Nurseries	Apply a single or split (halved) application as a 36-inch band (18" either side of the row) prior to egg deposition. Use 2.00 to 2.75 lb/1000 feet of row in a 36"-band (18" either side of the planted row).					Apply May through July. For optimum control, treatment should be followed by rainfall or irrigation.

RESTRICTIONS

Do not apply to soils which are water-logged, or saturated. This condition will not allow the penetration of water into the root zone of the plants.

Do not over-irrigate or allow excessive runoff to occur following an application of MERIT 1 G. Do not apply to bedding plants intended to be used as food crops.

For outdoor ornamentals grown in beds, applications of MERIT 1 G cannot exceed a total of 40 lb per acre per year.

On plants with a production cycle of less than one year, application is not to exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year, application may not exceed once a year.

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 container into application equipment. Dispose of empty containers by incineration in a sanitary landfill 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 800-424-9300.

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