

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Peeticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460

3125-418

EPA Reg.

Husber:

Date of Issuance:

MAR 18 1994

NOTICE OF PESTICIDE:

x Registration Reregistration

Term of Issuance:

Conditional, Expires: September 30, 1998

Name of Posticide Product:

Merit 2

(under FIFRA, as amended)

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Name and Address of Registrant (include EIP Code):

Miles Inc. 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/reregisteration 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.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(C) provided that you:

- 1. Submit data required to change this registration to an unconditional FIFRA section 3(c)(5) registration. The required data with deadlines for submitting the required data are listed on the second page of this notice of Pesticide Registration.
  - Make the following label changes:
- a) Add the phase, "EPA Registration No. 3125-418" to your label before you release the product for shipment.
- b) Add a statement to exclude use on grass grown for seed and research plots.

Signature of Approving Official:

DENNIS H. EDWARDS

Date:

Dennis H. Edwards, Product Manager (19) Insecticide Branch Rodenticide Branch Registration Division (H7505C)

MAR 18 1994

EPA Form \$570-6

(1)

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3. Submit five (5) copies of your final printed labeling, with the changes referred to above, before you release the product for shipment.

## Required Data and Deadlines for Submissions of Data:

## Toxicology

1. You must submit acute and subchronic neurotoxicity testing. These studies must be received by the Agency by June 30, 1994.

### **Environmental Fate**

2. The submitted validated analytical methods for the determination of Imidacloprid and degradates of toxicological concern in ground and surface water samples must be acceptable or Miles must make appropriate corrections/additions and resubmit the analytical method within 6 months after notification.

## Ecological Effect

- 3. Submit a new mallard reproduction study to establish the NOEC for eggshell thickness. This study must be received by the Agency by November 30, 1994.
- 4. Conduct a baseline field monitoring study to locate suitable sites and avian species (a species that would have high exposure to NTN on turf during the nesting reproduction period of this species). This study must be received by the Agency by November 30, 1994.
- 5. Once the appropriate avian species has been identified, you must demonstrate that this species has reasonable sensitivity in order to be used as an indicator species, ie shows reproductive impairment at levels that can expected to be found in the environment. These studies must be received by the Agency by December 30, 1995.
- 6. You must submit an acceptable avian reproduction monitoring study with the appropriate species. The study should be at least 2 years in length (2 full nesting seasons). This study must be submitted by December 31, 1997.
- 7. An annual progress report of the monitoring study must be submitted by September 30, of each year during the period this product is conditionally registered.

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

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

Sincerely,

DENNIS H. EDWARDS

Dennis H. Edwards, Jr. Product Manager 19 Insecticide-Rodenticide Branch Registration Division (H7505C)

Enclosure



U.S. LABEL

Systemic Insecticide

Reason to Issue: To submit final label language to EPA based on their 01/27/94 letter.

Date of Draft: <u>Q2/22/94(Pre-Reg)(C)</u>
Supersedes Pre-Reg Drafts Dated: <u>Q6/24/93</u>
<u>11/09/93 and 12/15/93</u>

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# MERIT 2 Systemic Insecticide

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## FOR INSECT CONTROL IN TURFGRASS AND ORNAMENTALS

ACTIVE INGREDIENT:

Contains 2 pounds of imidacloprid per gallon SHAKE WELL BEFORE USING EPA File Symbol No. 3125-URI

Net Contents: \_\_\_ Ounces

## STOP - READ THE LABEL BEFORE USE

## **KEEP OUT OF REACH OF CHILDREN**

# **CAUTION**

(See Rear Panel for Statements of Practical Treatment and Other Precautionary Statements)

# **AVISO**

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.)



## **GENERAL INFORMATION**

#### **APPLICATION TO TURFGRASS**

MERIT 2 Systemic Insecticide can be used for the control of soil inhabiting pests of turfgrass, such as Northern & Southern masked chafers, Cyclocephala borealis, C. *immaculata,* and*lor C. lurida*; Asiatic garden beetle, Maladera castanea; European chafer, Rhizotrogus majalis; May or June beetle, Phyllophaga spp.; Japanese beetle, Popiliis japonics; Oriental beetle, Anomala orientalis; Billbugs, Spherophorus spp.; Annual bluegrass weevil, Hyperodes spp.; Black turfgrass ataenius, Ataenius MERIT 2 Systemic spretulus and Aphodius app. Insecticide can be used as directed on all-sites where turigrase is grown, such as but not limited to, home lawns and-commercial turf, golf courses, airports, comotories, sarks, playgrounds, othletic fields, and any other area where lawns or turforace can be infected with destructive ecil-incecte (information alliant succession and thorong converse complete as multi-family residential completes as multi-family residential completes; cemeteres, parks, playgrounds, and restricts fields MERIT Insecticide can not be used on commercial and larms.

The active ingredient in MERIT 2 Systemic 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 pests, 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 area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. Applications cannot exceed a total of 2 pints (0.5 b) the of active ingredient) per acre per year.

APPLICATION EQUIPMENT FOR USE ON TURFGRASS Apply MERIT 2 Systemic Insecticide in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that

equipment is working properly.

#### APPLICATION TO ORNAMENTALS

MERIT 2 Systemic Insecticide is for use on ornamentals in commercial and residential landscapes interior and exterior plantscapes, and other areas where ornamentals or non-food producing plants are grown. MERIT 2 Systemic Insecticide is a systemic product and will be translocated upward into the plant system. To assure optimum effectiveness, the product must be placed where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution will enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays.

When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this translocation delay can take up to 60 days. For this reason, applications should be made prior to anticipated pest infestation to achieve optimum levels of control.

For outdoor ornamentals, proadcast applications cannot exceed a total of 2 5 pints (0.5 0.4 lb of active ingredient) per acre per year.

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

APPLICATION EQUIPMENT FOR ORNAMENTAL USES MERIT 2 Systemic Insecticide mixes readily with water and may be used in many types of application equipment. Mix product with the required amount of water and apply as desired dependent upon the selected use pattern.

When making foliar applications on hard to wet foliage such as holly, pine, or ivy, the addition of a spreader/sticker is recommended. For optimum offectiveness, applications should be made when the foliage can absorb the active ingredient systemically. If concentrate or mist type spray equipment is used, an equivalent amount of product should be used on the area sprayed, as would be used in a dilute application.

MERIT 2 Systemic Insecticide has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and other commonly used insecticides. Check physical compatibility using the correct proportion of products in a small jar test if local experience is unavailable.

Do not apply through any irrigation system.



RECOMMENDED APPLICATIONS FOR USE ON or IN ORNAMENTALS

shruos, evergreens, flowers, foliage plants, ground covers, and interior plantscapes).

## **TO CONTROL**

TO CONTROL		
PEST	DOSAGE MERIT 2	REMARKS
Adelgids Aphids Lacebugs Leafhoppers Leafminers Mealybugs Thrips WhiteFlies	1.6 fl oz (52.0 ml) per 100 gal of water	ALL ORNAMENTALS  Foliar Applications: Start treatments prior to establishment of high pest populations and reapply on an as needed basis. Refer to the GENERAL INFORMATION and APPLICATION EQUIPMENT sections for specific use directions for Foliar Applications.  SEE GENERAL INFORMATION
White grub larvae (such as Japanese beetle larvae, Chafers, Phyllophaga spp. Asiatic garden beetle, Oriental beetle)	.375 to <del>0.75</del> 13.6 fl oz per 1000 sq ft	Broadcast Applications: Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated. Do not use less than 2 gallons of water per 1000 sq ft. For optimum control, irrigate thoroughly to incorporate MERIT 2 Systemic Insecticide into the upper soil profile.  Refer to REMARKS section for use directions specific for FLOWERS and GROUND COVERS concerning additional use directions.  SEE GENERAL INFORMATION

## RESTRICTIONS

Do not graze treated areas or use clippings from treated areas for feed or forage. Avoid runoff or puddling of irrigation water following application. Keep children and pets off treated area until dry. Avoid application of MERIT 2 Systemic Insecticide 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 2 pt (0.5 ) Ib of active ingredient) per acre per year. Do not plant any food crop within one year of a treatment with MERIT 2 Systemic 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by 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.

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Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides above. In spill or leak incidents, keep unauthorized people away. You may contact the Miles Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Miles Kansas City Emergency Response telephone number is 816-242-2582, or contact Chemtrec at 800-424-9300.

Miles, Inc.
Specialty Products
Box 4913 Kansas City, MO 64120-0013