

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

NOTICE OF PESTICIDE:

x Registration Reregistration

(under FIFRA, as amended)

EPA Reg. Number:

Date of Issuance:

3125-492

JAN 28 1997

Term of Issuance:

Conditional, Expires: September 30, 1998

Name of Pesticide Product:

Merit(R) 60 WSP

Name and Address of Registrant (include ZIP 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)(B) provided that you:

- 1. Submit the data listed below according to the time frames listed with each data requirement:
- Add the phrase EPA Registration No. "3125-492" to your label before you release the product for shipment.
- Submit five (5) copies of your final printed labeling, before you release the product for shipment.

Signature of Approving Official:

Date:

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

JAN 28 1997

EPA Form 8570-6

page 2 EPA Reg. No. 3125-492

In the Registration of a similar product (EPA Reg. No. 3125-421) the Agency listed several ecological effects studies that needed to be submitted. Although those studies are not being requested for this registration at this time, they may be required in the future

Two small scale prospective groundwater monitoring studies must be submitted. Monitoring must continue for at least two full years. Information, coordination and reports are due to the Agency according to the schedule listed for EPA Reg. No. 3125-416, -417, & -418

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.

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 (H7505C)

Enclosure

Reason to Issue: To propose registration of new product.

RECD EPA/OPP/DPD2 Date of Draft: 05/28/96 (S)

Merit® 60 WSP6 JIN 13 A9 3

Greenhouse and Nursery Insecticide

For foliar and systemic insect control on omamental plants in nurseries and greenhouses.

ACTIVE INGREDIENT:

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]- N-nitro-2-imidazolidinimine	60.0%
INERT INGREDIENTS	40.0%
	100.0%

Keep water soluble packets in this container and store in a cool dry place but not below freezing (32°F). Do Not Remove Packets From Container Except For Immediate Use.

EPA Reg. No. 3125-X77 // 10 E

Net Contents: Six 20-gram packets

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, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or vapor.

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 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.

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.

ACCEPTED
with COMMENTS
in EPA Letter Dated

JAN 28 1997

Under the Federal Insecticide, Fungiside, and Redemicide Act as amended, for the posticide registered under EPA Reg. No. 3125-452



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 tollowed 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.

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 product is highly toxic to bees exposed to direct treatment or residues on the foliage of blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area

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 contact with anything that has been treated, such as plants, soil, or water, is the standard of the sta

AGRICULTURAL USE REQUIREMENTS continued

- Coveralls
- Waterproof gloves
- · Shoes plus socks

IMPORTANT: Read these entire DIRECTIONS FOR USE, GENERAL INFORMATION, AND CONDITIONS OF SALE before using MERIT 60 Greenhouse and Nursery WSP 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 into other end-use products.



MERIT 60 WSP Greenhouse and Nursery Insecticide is for insect control on ornamental plants in nurseries and greenhouses. MERIT 60 WSP is a systemic product and will be translocated upward within the plant. This product is to be applied as a soil treatment only. To assure optimum effectiveness, the product must be placed where the roots of the plant can absorb the active ingredient. Irrigate moderately but thoroughly after application, allowing no leaching and runout from container for at least 10 days after application.

Incorporation: Incorporation of MERIT 60 WSP can be achieved by cultivation, irrigation, rainfall, mechanical placement, soil injection, drenching, and broadcast sprays.

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 therefore be made well in advance of expected insect activity.

Bark Media: Media with 30 to 50% or more bark content may confer a shorter period of protection when treated with MERIT 60 WSP.

Tank Mixes: MERIT 60 WSP has been found to be compatible with commonly used liquid fertilizers, fungicides and insecticides. Check physical compatibility using the correct proportion of products in a small jar test if local experience is unavailable.

PLEASE NOTE: Do not use MERIT 60 WSP packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic which is not soluble in water. However, normal chlorinated water is acceptable for mixing.

MIXING: Within each foil pouch is a clear inner packet containing MERIT 60 WSP. The clear inner packet is water soluble. Do not allow packets to become wet prior to adding to the tank. Do not handle the clear inner packets with wet hands or wet gloves. Rough handling may cause breakage. Reseal outer carton to protect remaining packets. To prepare the mixture, remove the outer foil pouch and drop the required number of unopened clear water soluble packets, as determined under "Recommended Drench and Irrigation Applications", into the spray tank while filling with water to the desired level. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within a few minutes from the time they are added to the water. Cooler water temperatures increase the time needed for the inner packet to dissolve completely.

APPLICATION EQUIPMENT FOR USE ON ORNAMENTALS AND IN FIELD NURSERIES: Apply MERIT 60 WSP in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for soil application of 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 THROUGH IRRIGATION SYSTEMS

MERIT 60 WSP may be applied at rates recommended on this label either alone or in tank mixture with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:10 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours.

Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system.

Apply MERIT 60 WSP only through microirrigation (individual spaghetti tube), drip irrigation, overhead irrigation, ebb and flood, or hand-held or motorized calibrated irrigation equipment.

Do not apply this product through any other type of irrigation system. Crop injury of lack of effectiveness can result from nonuniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

If the source of water for your irrigation system is a public water supply, follow the instructions below.

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contains a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of

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pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn form the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injunction pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

SAFETY DEVICES FOR IRRIGATION SYSTEMS NOT CONNECTED TO A PUBLIC WATER SUPPLY:

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid form being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional intertocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the pesticide distribution is adversely affected.
- Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of material that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

RESTRICTIONS

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

Do not allow leachate runout for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient. Do not apply to bedding plants intended to be used as food crops.

For outdoor ornamentals grown in beds or turf, applications of MERIT 60 WSP cannot exceed a total of 10.7 oz (0.4 lb of active ingredient) 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. Do not plant food crops in treated soil within one year of treatment.

RECOMMENDED DRENCH AND IRRIGATION APPLICATIONS

For use only on greenhouse and nursery omamental plants using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, ebb and flood irrigation, or hand-held or motorized calibrated irrigation equipment.

PEST	USE PATTERN DOSAGE - MERIT 60 WSP		MERIT 60 WSP	REMARKS	
Adelgids Aphids Thrips (suppression)* Whiteflies	Plants in containers	Herbaceous Species (one or two plants per pot) Woody Perennials	Container Size (inches) 2 3 4 5 6 7 8 9 10 11 12 2 3 4 5 6 7 8 9 10 11	No. pots treated with one (1) Packet 3000 2000 1500 1200 1000 850 750 675 600 550 500 2000 1350 1000 800 650 550 500 450 400 350	Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Apply according to label directions. Follow application with moderate irrigation. Irrigate carefully during the next 10 days in order to avoid loss of active ingredient due to leaching. * Feeding on foliage only; thrips in buds and flowers will not be suppressed.
		Herbaceous Species (three or more plants per pot)	12 Use the above wood	300 ly perennial rates	
	Ornamental p	lants grown in s, or beds	One packet per 3000 sq ft		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 mixture per 1000 sq ft. Apply as a broadcast treatment and incorporate Into the medium before planting or apply after plants are established. If application is made to established plants, optimum control will be attained if area is lightly imigated after application. Allow no leaching or runout for 10 days after application.



RECOMMENDED DRENCH AND IRRIGATION APPLICATIONS

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PEST	USE PATTERN	DOSAGE-	MERIT 60 WSP	REMARKS
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, Masked Chafers, European Chafer, Oriental Beetle, Asiatlc Garden Beetle)	Containerized Plants	Container Size 1 gallon 2 gallon 3 gallon 5 gallon	No. Pots Treated with One (1) Packet 240 to 120 120 to 60 90 to 40 65 to 30	Apply in sufficient water to wet the potting medium. 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. ** For use on non-bearing citrus nursery stock
White grub larvae (such as Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	Field Nurseries	(18 inches eith prior to eg Use 1 packet prior grub control in broadcast a	a 36-inch band er side of the row) gg deposition. er 1000 feet of row. hareas of turf, apply a pplication using her 3000 sq ft.	Vegetation in the area to be treated should be mowed to a height of 3 inches or less prior to application. Mowing to the lowest possible height will insure greater consistency of control. Apply May through July. For optimum control, treatment should be followed by rainfall or irrigation. Do not use less than 2 gallons of spray volume per 1000 square feet.

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: After removal of all PVA packets, dispose of empty container in a sanitary landfill, 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. 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 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.

BEST AVAILABLE COPY

Bayer Corporation Specialty Products Box 4913 Kansas City, MO 64120-0013

