secticide

439-8431.YLD

3125- 439

U.S. LABEL

Reason to Issue: To add mole crickets; to conform product labeling.

Date of Draft: 01/18/95(S)

# MERIT 75 WSP

Insecticide

# FOR FOLIAR AND SYSTEMIC INSECT CONTROL IN TURFGRASS. LANDSCAPE ORNAMENTALS AND INTERIOR PLANTSCAPES

**ACTIVE INGREDIENT:** 

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine ...... 75.0% INERT INGREDIENTS ..... 25.0%

100.0%

Keep water soluble packets in this container and store in a cool dry place but not below freezing (32°F).

EPA Reg. No. 3125-439

Net Contents: \_\_\_\_ Pounds

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## 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)

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.)

DO NOT REMOVE PACKETS FROM CONTAINER EXCEPT FOR IMMEDIATE USE.

MILES //

ACCEPTED

as amended, for the pesticide personal under 25-439 EPA Reg. No.

### 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. Wash thoroughly with soap and water after handling.

Remove contaminated clothing and wash before reuse. Keep children or pets off treated area until spray is dry.

#### 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 MI) 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.

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 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.

IMPORTANT: Read these entire DIRECTIONS FOR USE, GENERAL INFORMATION, AND CONDITIONS OF SALE before using MERIT 75 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. MILES 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 MILES AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

Do not formulate this product into other end-use products.

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#### **APPLICATION TO TUREGRASS**

MERIT 75 WSP Insecticide can be used for the control of soil inhabiting pests of turigrass, 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 beetle, Phyllophaga spp.; Japanese beetle, Popillia japonica; Oriental beetle, Anomala orientalis; Billbugs, Spherophorus spp.; Annual bluegrass weevil, Hyperodes spp.; Black turfgrass ataenius, Ataenius spretulus and Aphodius spp. MERIT 75 WSP Insecticide can be used as directed on turforass 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 75 WSP Insecticide can not be used on commercial sod farms.

The active ingredient in MERIT 75 WSP 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 8.6 oz (0.4 lb of active ingredient) per acre per year.

#### **APPLICATION EQUIPMENT FOR USE ON TURFGRASS**

Apply MERIT 75 WSP 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 75 WSP Insecticide is for use on ornamentals in commercial and residential landscapes and interior plantscapes. MERIT 75 WSP 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, broadcast applications cannot exceed a total of 8.6 oz (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 FOR ORNAMENTAL USES MERIT 75 WSP 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 nattern.

When making foliar applications on hard to wet foliage such as holly, pine, or ivy, the addition of a spreader/sticker is recommended. 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.

MIXING: Within each foil pouch is a clear inner packet containing MERIT 75 WSP Insecticide. The clear inner packet is water soluble. Do not allow packets to become wet prior to adding to the spray 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 spray mixture, remove the outer foil pouch and drop the required number of unopened clear water soluble packets, as determined under "Recommended 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.

CAUTION: Do not use MERIT W\$P packets in a tank-mix with products that contain Buron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic which is not soluble in water or solvents such as diesel oils, kerosene, gasoline or alcohol. Do not attempt to use the WSP packets directly in diesel oils or summer spray type oils as in ULV or LV uses. PVA packets are water soluble not oil soluble.

MERIT 75 WSP Insecticide has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and other commonly used insecticides.

of products in a small jar test if local experience is unavailable.

Do not apply through any irrigation system.

Check physical compatibility using the correct proportion

RECOMMENDED APPLICATIONS					
CROP	PEST	DOSAGE MERIT 75 WSP	REMARKS		
Turf Grasses	Larvae of: Japanese beetle Black turfgrass staenius Northern masked chafer Southern masked chafer European chafer Oriental beetle Asiatic garden beetle Phyllophaga spp.	6,4 oz (4 peckets) per ecre er 1,6 oz (1 pecket) per 11,000 eq 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: Billbugs "Annual bluegrass weevil	6.4 to 8.0 oz (4 to 5 packets) per acre or 1.6 oz (1 Packet) per 8,250 to 11,000 sq ft			
	Mole crickets	8.0 oz (5 packets) per acre or 1.6 oz (1 packet) per 8,250 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. Follow label instructions for other insecticides when tank-mixing.		

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. Do not apply more than 8.6 oz (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.

For use only in and around industrial and commercial buildings and residential areas						
CROP	PEST	DOSAGE MERIT 75 WSP	REMARKS			
Trees Shrubs Evergreens Flowers Foliage plants Ground covers Interior plantscapes	Adelgida Aphids Elm leaf beetle Lecebugs Leafhoppers Leafminers Meelybugs Sawfly lervee Thrips White Flies	1.6 oz (1 pecket) per 300 gal of water	Folier Applications: Start treatments prior to establishment of high pest populations and reapply on an as needed basis.			
	White grub larvae (such all Japuriese beetle lervec, Chafers, Phylicphage app. Asiatic garden beetle, Oriental beetle)	1,6 oz (1 packet) per 8,250 to 11,000 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 75 WP Insecticide into the upper soil profile.  Refer to REMARKS section for use directions specific for FLOWERS and GROUND COVERS concerning additional use directions.			

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RECOMMENDED APPLICATIONS (Continued)						
PEST	CROP	DOSAGE MERIT 75 WP	REMARKS			
Adelgids Aphids Lacebugs Leafminers Mealybugs Scale insects Thrips Whiteflies Pine Tip moth isrvae Elm Leaf beetle Sawfly tarvae Japanese beetle	Trees	1.6 oz (1 pecket) per 24 to 48 inches of cumulative trunk diarneter	Soil Injection: GRID SYSTEM: Holes should be speced on 2.5 foot centers, in a grid pattern, extending to the drip line of the tree. CIRCLE SYSTEM: Apply in holes everily speced in circles, (use more than one circle dependent upor the size of the tree) beneath the drip line of the tree extending in from that line. BASAL SYSTEM: Space injection holes evenly around the base of the tree trunk no more than 6 to 12 inches out from the base.  Mix required dosage in sufficient water to inject an equal amount of solution is each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. For optimum control, keep the treatment area moist for 7 to 10 days. Do not use less than 4 holes per tree.  Soil Drench: Uniformly apply the dosage in no less than 10 gallons of wate per 1000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.			
Leafhopper White grub- larvae	Shrubs	1.6 oz (1 packet) per 48 ft of cumulative shrub height  to  1.6 oz (1 packet) per 24 ft of cumulative shrub height	Soil Injection: Apply to individual plants using dosage indicated.  Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per shrub.  Soil Drench: Uniformly apply the dosage in no less than 10 gallons of water per 1000 square feet as a drench around the base of the tree, directed to the root zone. Remove plestic or any other barrier that will stop solution from reaching the root zone.			
	Flowers & Ground Covers	1.6 oz (1 pecket) per 8,250 to 11,000 sq ft	Apply as a broadcast treatment and incorporate into the soil before planting of apply after plants are established. If application is made to established plants optimum control will be attained if area is irrigated thoroughly after application			





#### 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

75 WSP 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 8.6 oz (0.4 lb of active ingredient) per acre per year. Do not plant any food crop within one year of a treatment with MERIT 75 WSP 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 container into application equipment. Then 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 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.

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