# Merit® 75 WSP

ACCEPTED

APR 25 2000

Under the Rederal Insecticide, Pangleide, and Rodenticide Act, as arrested under EPA Reg. No. 3/15. 1/16.

#### Insecticide

For foliar and systemic insect control in turfgrass, landscape ornamentals, fruit and nut trees, and interior plantscapes.

#### **ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]N-nitro-2-imidazolidinimine	75%
OTHER INGREDIENTS	. 25%
•	100%

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. 3125-439

Net Contents: \_\_\_ Pounds -

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

#### CAUTION

PRECAUCION AL USUARIO: Si usted no puede teer 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.)

## 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 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. 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.

**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. 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.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### **APPLICATION TO TURFGRASS**

MERIT 75 WSP 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 glarden beetie, Maladera castanea; European chafer, Rhizotrogus majalis; Viay or June beetle, Phyllophaga spp.; Japanese beetle, Fopillia japonica; Oriental beetle, Anomala brientalis; Billbugs, Spherophorus spp.; Annual bluegrass weevil. Hyperodes spp.; Black turfgrass ataenius, Ataenius spretulus and Aphodius spp.; and mole crickets, Scapteriscus spp. MERIT

75 WSP Insecticide can also be used for the suppression of cutworms and hairy chinchbugs in turfgrass areas. MERIT 75 WSP 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 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 from root uptake. 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 may enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

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 could take 60 days or longer. 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 ob (0.4 lb of active ingredient) per acre per year.

#### Ant Management Programs

Use MERIT 75 WSP to control aphids, scale insects, mealybugs and other sucking pests on ornamentals to limit the honeydew available as a food source for ant populations. MERIT 75 WSP applications can be then be supplemented with residual sprays, bait placements or other ant control tactics to further reduce the pest population.

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.

Not for use on commercial fruit and nut trees.

Application Equipment for Foliar Applications
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 pattern.

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.

NOTE: Do not use MERIT 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 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. Use of chlorinated water is acceptable.

MERIT 75 WSP 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.

#### 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, or frozen, 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.

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.

RECOMMEN	DED APPLICATIONS	
CROP	PEST	DOSAGE MERIT 75 WSP
Turtgrasses	Larvae of:	1.6 oz
	Annual bluegrass	(1 Packet)
	weevil	per 8,250 to 11,000
	Asiatic garden beetle	sq ft
	Billbug	
	Black turfgrass ataenius	
	Cutworm (suppression)	
	European chafer	
	Japanese beetle	
	Northern masked chafer	
	Oriental beetle	,
	Phyllophaga spp.	
	Southern masked	
	chafer	
	For optimum control of	
	annual bluegrass week prior to egg hatch of the t	
	Be sure to read "APPLIC Section of this label.	• •
	Hairy chinchbug	1.6 oz
	(suppression)	(1 packet)
	Mofe cricket	per 8,250 sq ft
	For suppression of hairy application prior to hatchingmphs.	
	For control of mole cricke	ets make application
	prior to or during the peal	k egg hatch period.
	When adults or large nyn actively tunneling, MERI	npns are present and
	be accompanied by a cur	ative insecticide.
	Follow label instructions t	for other insecticides
<u> </u>	when tank-mixing.	
Consult your lo	cal State Agricultural Expe	riment Station, or
State Extensio regarding timin	n Turf Specialists for more g of application.	specific information
NOTE: For op	timum control, irrigation or	rainfall should occur
within 24 hours	after application to move t	he active ingredient
hrough the the	tch. Do not apply more 8.6	S oz (0.4 lb of active
ingrewent) per until after suffic	acre per year. Avoid mow ient irrigation or rainfall has	ing turi of lawn afea
uniformity of ap	plication will not be affecte	d.

RECOMMENDED APPLICATIONS		
For use only in and around industrial and commercial buildings and residential areas		
CROP	PEST	DOSAGE MERIT 75 WSP
Trees Shrubs Evergreens Flowers Foliage plants Groundcovers Interior plantscapes	establishment of I	1.6 oz (1 packet) per 300 gal of water  ns: Start treatments prior to high pest populations and
	reapply on an as White grub larvae (such as Japanese beetle larvae, Chafers, Phyllophaga spp. 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 WSP Insecticide into the upper soil profile. Refer to use directions specific for FLOWERS and GROUNDCOVERS concerning additional use directions.	

#### RECOMMENDED APPLICATIONS Trees, Shrubs, Flowers and Groundcovers

For use only in and around industrial and commercial buildings and residential areas to control the following pests:

Flatheaded borers Pine tip moth (including bronze Aphids larvae birch borer and **Psyllids** Armored scales alder borer) Royal palm bugs (suppression) Japanese beetles Black vine weevil Sawfly arvae Lace bugs larvae Soft scales Leafhoppers Elm Leaf beetles Thrips Leafminers Eucalyptus (suppression) longhorned Mealybugs White grub larvae borer Whiteflies

Trees 1.6 oz (1 packet) MERIT 75 WSP per 24 to 48 inches of cumulative trunk diameter

Soil Injection: GRID SYSTEM: Holes should be spaced on 2.5 foot centers, in a grid pattern, extending to the drip line of the tree. CIRCLE SYSTEM: Apply in holes evenly spaced in circles, (use more than one circle dependent upon 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

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. For optimum control, keep the treated 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 water 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.

For Control of Specified Borers: Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

Shrubs	1.6 oz (1 packet) MERIT 75 WSP	
;	per 24 to 48 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 plastic or any other barrier that will stop solution from reaching the root

Flowers and	1.6 oz (1 packet) MERIT 75 WSP
Groundcovers	per 8,250 to 11,000 sq ft

Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. If application is made to established plants, optimum control will be attained it area is irrigated thoroughly after application.

RECOMMENDED APPLICATIONS  For use only in and around residential areas			
CROP PEST RATE PER APPLICATION			
Pome Fruits Apple Crabapple Loquat Mayhaw Pear	Aphids (except Wooly apple aphid) Leafhoppers Leafminer Mealybugs	1.6 oz (1 packet) per 300 gal of water)	2.1 oz per acre <sup>1</sup>

Apply specified dosage as foliar spray as needed after petal-fall is complete

San Jose Scale

Pear

Quince

(oriental)

For control of rosy apple aphid, apply prior to leafrolling caused by the pest.

For first generation leafminer control, make first application as soon as petal-fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. MERIT 75 WSP will not control late stage larvae.

For San Jose Scale, time applications to the crawler stage. Treat each generation.

For late season (preharvest) control of leafhopper species, apply MERIT 75 WSP while most leafhoppers are in the

For optimal control of mealybug, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybug.

Do not apply more than 2.1 ounces per acre in a single application. Do not make more than 5 applications.

Allow 10 or more days between applications. Allow at least 7 days between last application and harvest.

Pecan	Yellow pecan	1.6 oz	2.1 oz
	aphid Black margined aphid	(1 packet) per 300 gal of water)	per acre <sup>1</sup>
	Pecan leaf phylloxera	,	
	Pecan spittlebug		
	Pecan stem phylloxera		

Make foliar applications as pests begin to build before populations become extreme. Two applications at a 10 to 14 day interval may be required to achieve control. Scout and retreat if needed.

Thorough uniform coverage of foliage is necessary for optimal control. Addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's recommended use rate may improve coverage.

Do not apply more than a total of 6.3 ounces of MERIT 75 WSP per acre per year. Do not make more than 3 applications.

Allow 10 or more days between applications.

The amount of MERIT 75 WSP required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees

#### RECOMMENDED APPLICATIONS

For use only in and around industrial and commercial buildings and residential areas

CROP	PEST	RATE PER APPLICATION	
Grapes	Leafhoppers Mealybugs	1.6 oz (1 packet) per 300 gal of water	1.0 oz per acre

Apply specified dosage as a foliar spray using 200 gallors of water per acre. Do not apply more than a total of 2.0 ounces of MERIT 75 WSP per acre per year. Allow at least 14 days between applications. Applications may be applied up to and including day of harvest.

#### 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 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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