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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



SEP 13 2011

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Norma Pangilinan, Ph.D.
Bayer Environmental Science
P.O. Box 12014
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Dear Dr. Pangilinan:

Subject: Fast Track Amendment and SUPPLEMENTAL LABEL
to increase tree soil application rates per tree but not per acre
Merit 75 WSP
EPA Registration No. 432-1318

The labeling referred to above submitted in connection with the Federal Insecticide, Fungicide and Rodenticide, as amended is acceptable.

A stamped copy of the labeling is enclosed for your records. Please submit one final printed copy of the labeling before releasing the product for shipment. If you have any questions regarding this label, please contact Autumn Metzger at (703) 305-5314 or Metzger.autumn@epa.gov.

Sincerely,

Driss Benmhend
Acting Product Manager 01
Insecticide-Rodenticide Branch
Registration Division (7505P)



Bayer Environmental Science

A Division of Bayer CropScience LP
P.O. Box 12014, 2 T. W. Alexander Drive
Research Triangle Park, North Carolina 27709

Merit® 75 WSP Insecticide
EPA Reg. No. 432-1318
For Trees

Supplemental Label

Merit® 75 WSP Insecticide

This supplemental label expires on September 13, 2014 and must not be used or distributed after this date.

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read this label and the product package label before using this product. This Supplemental Label must be in possession of the user at the time of pesticide application. Follow all applicable directions, restrictions, Worker Protection Standard requirements, and precautions on the registered product label for Merit® 75 WSP Insecticide.

DIRECTIONS FOR USE

TREES & SHRUBS: SOIL APPLICATIONS

Trees and Shrubs	1.6 oz (1 packet) MERIT 75 WSP Insecticide per 24 to 48 inches of cumulative trunk diameter or 24-48 feet of cumulative shrub height		
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Adelgids (including hemlock woolly adelgid)	Leaf-feeding bugs (including lace bugs, leaf bugs, and plant bugs)	Leafminers	Sawfly larvae
Aphids		Mealybugs	Soft scales
Leaf-feeding beetles (including Japanese beetle and vine weevil adults)	Leafhoppers, planthoppers, sharpshooters (including glassy-winged sharpshooter) and spittle bugs	Pine tip moth larvae	Whiteflies
		Psyllids	
		Royal palm bug	

Trees and Shrubs	1.6 oz (1 packet) MERIT 75 WSP Insecticide per 24 inches of cumulative trunk diameter or 24 feet of cumulative shrub height		
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Armored scales (including but not limited to: camellia, false oleander, Florida red, oystershell, tea, and white peach scales)	Roundheaded borers (including Asian longhorned beetle)
Flatheaded borers (including emerald ash borer)	Thrips (foliage only)
	White grub, billbug, and root weevil larvae

Example equation: $[x \text{ (total DBH inches of a tree)} / y \text{ (cumulative trunk diameter rate to be applied)}] * 1.6 \text{ oz (1 packet)} = \text{total oz of product per tree.}$

Examples of single tree calculations:

To calculate the rate range with a 12 inch DBH tree:
 $(12/48) * 1.6 \text{ oz. (1 packet)} = 0.4 \text{ oz per tree}$
 $(12/24) * 1.6 \text{ oz. (1 packet)} = 0.8 \text{ oz per tree}$

If treating multiple trees at a similar rate, add the DBH of the trees together and divide by rate to be applied.

Example of multiple trees using similar rate of 48 (y): 3 trees with DBH of 8, 10, & 9 inches. Total cumulative inches of DBH is 27 (x).
 $(27/48) * 1.6 \text{ oz. (1 packet)} = 0.9 \text{ oz total for all three trees}$

ACCEPTED

SEP 13 2011

Under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, for the pesticide registered under:

Soil Injection: GRID SYSTEM: Space holes 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 the base.

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 or 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 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.

RESTRICTION:

No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.

Do not apply more than 8.53 oz (0.4 lb active ingredient) per acre per year.

Trees: SOIL APPLICATIONS FOR Trees with a 15 inch of trunk diameter at breast height (D.B.H.) or greater TO TREAT THE PESTS LISTED BELOW

Use the following rates as a function of tree DBH. Apply 1.6 ounces (1 packet) of Merit 75 WSP Insecticide per 12 to 48 inches of cumulative trunk diameter for tree(s) intended to be treated. You may use the higher rate of 1.6 ounces (1 packet) of Merit 75 WSP Insecticide per cumulative trunk diameter (12 inches to less than 24 inches) only to control the pests listed below.

RESTRICTION: Do not apply more than 8.53 oz (0.4 lb ai) per year

DBH = is measured 4.5 feet from the ground

Emerald Ash Borer
Bronze birch borer

Asian Longhorned Beetle
Eucalyptus Longhorned Borer

Alder Borer

Example equation: $[x \text{ (total DBH inches of a tree)} / y \text{ (cumulative trunk diameter rate to be applied)}] * 1.6 \text{ oz (1 packet)} = \text{total oz of product per tree.}$

Calculation examples for a single tree with a DBH greater than 15 inches:

To calculate the higher rate range with a 30 inch DBH tree:
 $(30/12) * 1.6 \text{ oz. (1 packet)} = 4 \text{ oz per tree}$

To calculate the lower rate range with a 30 inch DBH tree:
 $(30/48) * 1.6 \text{ oz. (1 packet)} = 1 \text{ oz per tree}$

Calculation examples for multiple trees with a DBH greater than 15 inches:

To calculate the higher rate range for multiple trees, add the DBH of the trees together and divide by rate to be applied.

Example of multiple trees using similar rate of 12 (y): 3 trees with DBH of 15, 20, & 25 inches. Total cumulative inches of DBH is 60 (x).
 $(60/12) * 1.6 \text{ oz. (1 packet)} = 8 \text{ oz for all three trees.}$

To calculate the lower rate range for multiple trees, add the DBH of the trees together and divide by rate to be applied.

Example of multiple trees using similar rate of 48 (y): 3 trees with DBH of 15, 20, & 25 inches. Total cumulative inches of DBH is 60 (x).
 $(60/48) * 1.6 \text{ oz. (1 packet)} = 2 \text{ oz for all three trees.}$

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Soil Injection: GRID SYSTEM: Space holes 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 the base.

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 or 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 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.

RESTRICTION:

No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.

Do not apply more than 8.53 oz (0.4 lb active ingredient) per acre per year.

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

Merit is a registered trademark of Bayer.

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GROUP 4A INSECTICIDE

Merit[®] 75 WSP Insecticide

For foliar and systemic insect control of listed pests in turfgrass (including sod farms), landscape ornamentals, fruit and nut trees, and interior plantscapes.

(Marketing Claims for Product Packed in Mini Drum)

Merit Mega Mini-Drum
Treats up to 27.5 acres
25% More Merit, Free

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. 432-1318

EPA Est. No. ____

STOP - Read the label before use.

Keep out of reach of children.

CAUTION

PARA EL USUARIO: Si usted no lee o entiende inglés, no use este producto hasta que le hayan explicado completamente las instrucciones que figuran en la etiqueta.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-800-331-2867

FIRST AID

If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

In case of emergency call toll free the Bayer Environmental Science Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

Note To Physician: No specific antidote is available. Treat the patient symptomatically.

ACCEPTED

SEP 13 2011

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for the
pesticide registered under:

EPA. Reg. No: 432-1318

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.

Personal Protective Equipment (PPE):

WPS USES: Applicators and Other Handlers who handle this product for any use covered by the Worker Protection Standard (40 CFR part 170) – in general, agricultural plant uses e.g., use in sod farms, must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.
- Shoes plus socks

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

Non-WPS USES: Applicators and other handlers who handle this product for any use NOT covered by the Worker Protection Standard (40 CFR part 170) – in general, only agricultural plant uses are covered by the WPS, must wear:

- Shirt and pants
- Gloves
- Shoes plus socks

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.

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.

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.

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.

MERIT 75 WSP Insecticide can be used as directed on turfgrass and ornamentals on: residential home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, athletic fields and sod farms.

MERIT 75 WSP Insecticide can be used by soil application as directed on trees, shrubs, flowers and groundcovers in sites: in and around the perimeter of industrial and commercial buildings; residential areas; interior landscapes; municipal, city, state and national forested areas; and private wooded areas.

Resistance Management Recommendations

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

MERIT 75 WSP Insecticide contains a Group 4A insecticide. Insect biotypes with acquired or inherent resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species.

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 applied by drenching, 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:

- Coveralls
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: 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 below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer Environmental Science Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer Environmental Science Emergency Response Telephone No. is 1-800-334-7577 or contact Chemtrec at 1-800-424-9300.

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: Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Offer for recycling, if available or 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.

[Container Disposal Statement for Merit Mega Mini Drum]:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Offer for recycling, if available or 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.

APPLICATION TO TURFGRASS

MERIT 75 WSP Insecticide can be used for the control of soil inhabiting pests of turfgrass, Northern & Southern masked chafers, *Cyclocephala borealis*, *C. immaculata*, and/or *C. lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotroqus majalis*; Green June beetle, *Cotinis nitida*; 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.; European Crane Fly *Tipula paludosa*; and mole crickets, *Scapteriscus* spp. MERIT 75 WSP Insecticide can also be used for the suppression of cutworms and chinchbugs.

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.

Do not apply 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.

RESTRICTION: Do not apply more than a total of 8.53 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, make application prior to anticipated pest infestation to achieve optimum levels of control.

RESTRICTION: Outdoor applications cannot exceed a total of 8.53 oz (0.4 lb of active ingredient) per acre per year.

Ant Management Programs

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

RESTRICTION: Not for use in commercial greenhouses, nurseries, or on grasses grown for seed, or 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, apply an equivalent amount of product on the area sprayed, as would be used in a dilute application.

MIXING: Within each container are clear inner packets 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 container to protect remaining packets.

To prepare the spray mixture, drop the required number of **unopened** clear water soluble packets, as determined in the application rate chart, 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 75 WSP Insecticide 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.

RESTRICTION: Do not apply through any irrigation system.

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TURFGRASSES			
CROP	PEST	DOSAGE MERIT 75 WSP Insecticide	
Turfgrasses	Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbug Black turfgrass ataeenius Cutworm (suppression) European chafer	European Crane Fly Green June beetle Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer	
	For optimum control of grubs, billbugs, annual bluegrass weevil, and European crane fly larvae, make application prior to egg hatch of the target pest. Be sure to read "APPLICATION EQUIPMENT" Section of this label.		
	Chinchbug (suppression)	Mole cricket	1.6 oz (1 packet) per 8,250 sq ft
	For suppression of chinchbugs, make application prior to hatching of the first instar nymphs. For control of mole crickets make application prior to or during the peak egg hatch period. If application is not made prior to egg hatch or when adults or large nymphs are present and actively tunneling, apply Merit 75 WSP Insecticide in combination with a remedial insecticide to minimize damage to turf. 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, If rainfall does not occur within 24 hours after application, irrigate to move the active ingredient through the thatch. RESTRICTION: Do not apply more than 8.53 oz (0.4 lb of active ingredient) per acre per year. Do not mow turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.			

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TREES, SHRUBS, FLOWERS AND GROUNDCOVERS: FOLIAR APPLICATION			
CROP	PEST		DOSAGE MERIT 75 WSP Insecticide
Trees Shrubs Evergreens Flowers Foliage plants Groundcovers Interior plantscapes	Adelgids (including hemlock woolly adelgid) Aphids Leaf-feeding beetles (Japanese beetle, emerald ash borer and vine weevil adults) Leaf-feeding bugs (including lace bugs, leaf bugs, and plant bugs) Leafhoppers, planthoppers, sharpshooters (including glassy-winged sharpshooter) and spittle bugs)	Mealybugs Psyllids Sawfly larvae Thrips (foliage only) Whiteflies	1.6 oz (1 packet) per 300 gal of water
Foliar Applications: Start treatments prior to establishment of high pest populations and reapply on an as needed basis.			
	White grub larvae (such as Japanese beetle larvae, Chafers, <i>Phyllophaga</i> 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.			

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TREES & SHRUBS: SOIL APPLICATIONS

Trees and Shrubs

1.6 oz (1 packet) MERIT 75 WSP Insecticide
per 24 to 48 inches of cumulative trunk diameter or 24-48 feet of cumulative shrub height

Adelgids (including hemlock woolly adelgid)
Aphids
Leaf-feeding beetles (including Japanese beetle and vine weevil adults)

Leaf-feeding bugs (including lace bugs, leaf bugs, and plant bugs)
Leafhoppers, planthoppers, sharpshooters (including glassy-winged sharpshooter) and spittle bugs

Leafminers
Mealybugs
Pine tip moth larvae
Psyllids
Royal palm bug

Sawfly larvae
Soft scales
Whiteflies

Trees and Shrubs

1.6 oz (1 packet) MERIT 75 WSP Insecticide
per 24 inches of cumulative trunk diameter or 24 feet of cumulative shrub height

Armored scales (including but not limited to: camellia, false oleander, Florida red, oystershell, tea, and white peach scales)
Flatheaded borers (including emerald ash borer)

Roundheaded borers (including Asian longhorned beetle)
Thrips (foliage only)
White grub, billbug, and root weevil larvae

Example equation: $[x \text{ (total DBH inches of a tree)} / y \text{ (cumulative trunk diameter rate to be applied)}] * 1.6 \text{ oz (1 packet)} = \text{total oz of product per tree.}$

Examples of single tree calculations:

To calculate the rate range with a 12 inch DBH tree:

$(12/48) * 1.6 \text{ oz. (1 packet)} = 0.4 \text{ oz per tree}$

$(12/24) * 1.6 \text{ oz. (1 packet)} = 0.8 \text{ oz per tree}$

If treating multiple trees at a similar rate, add the DBH of the trees together and divide by rate to be applied.

Example of multiple trees using similar rate of 48 (y): 3 trees with DBH of 8, 10, & 9 inches. Total cumulative inches of DBH is 27 (x).

$(27/48) * 1.6 \text{ oz. (1 packet)} = 0.9 \text{ oz total for all three trees.}$

Soil Injection: GRID SYSTEM: Space holes 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 the base.

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 or 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 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.

RESTRICTION:

No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.

Do not apply more than 8.53 oz (0.4 lb active ingredient) per acre per year.