

228-438

10/28/2010

10/16



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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

NuFarm Americas, Inc.
c/o Ms. Georgia Anastasiou
Lewis & Harrison
122 C Street, N.W. Suite 740
Washington, DC 20001

OCT 28 2010

Dear Ms. Anastasiou:

Subject: Amendment: Add restrictions per Agency pyrethroid labeling letter dated June 4, 2009, Update per PR Notices 2000-5, 2007-1 and 2008-1, and Revise Warranty section Bifenthrin 7.9% FL Nursery
EPA Reg. No. 228-438
Your submission dated September 3, 2010

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) section 3(c)(7)(a), is acceptable provided the following revisions are made prior to release for shipment under the amended labeling:

- 1) On page 3, under the heading DIRECTIONS FOR USE, after "DO NOT apply by any kind of irrigation system." add as the next two lines "DO NOT make applications during rain. DO NOT water the treated area to the point of runoff."
- 2) On page 5, after "DO NOT use household utensils to measure this product." add "Food utensils such as teaspoons or tablespoons must not be used for food purposes after use in measuring pesticides."
- 3) On page 9, at the end of the Imported Fire Ants entry (i.e., after "...or late evening hours." add "Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides.". Relocate the Note about spray rigs upwards to appear directly after the new teaspoons precaution. Be sure to eliminate the extra line space between the first and second lines of this Note.
- 4) On page 9, relocate the precautions from "Apply with ground application equipment only (and apply with nozzles not more than two feet above the turf)" to "DO NOT apply when turf grass areas are water-logged or soil is saturated with water (i.e., will not accept irrigation)." upward to appear directly under the heading TURF (GOLF COURSES AND SOD FARMS).

A stamped copy of the label is enclosed for your records. Please submit two copies of the revised amended labeling prior to release for shipment.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions regarding this letter, please contact Dana Pilitt, PhD of my staff at (703) 305-7071 or via e-mail at pilitt.dana@epa.gov.

Sincerely,



Richard Gebken
Product Manager 10
Insecticide Branch
Registration Division (7505P)

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

For retail sale to and use only by certified applicators, or persons under their direct supervision and only for the uses covered by the certified applicator's certification.

BIFENTHRIN 7.9% FL NURSERY

INSECTICIDE/MITICIDE

FOR COMMERCIAL NON-FOOD USE ON INDOOR AND OUTDOOR ORNAMENTALS, GREENHOUSES, NURSERIES, TURF ON GOLF COURSES AND SOD FARMS.

ACTIVE INGREDIENT:	By Wt.
Bifenthrin*	7.9%
OTHER INGREDIENTS:	<u>92.1%</u>
TOTAL:	100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum. This product contains 2/3 pounds active ingredient per gallon.

**KEEP OUT OF REACH OF CHILDREN
CAUTION - PRECAUCION**

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.)

SEE SIDE PANELS FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840**

NOTE: Spanish language is optional

EPA REG. NO. 228-438 EPA
EST. NO. _____

**MANUFACTURED BY
NUFARM AMERICAS INC.
BURR RIDGE, IL 60527-0866**



NET CONTENTS _____ GAL. (_____ L)

**ACCEPTED
with COMMENTS
In EPA Letter Dated:
OCT 28 2010**

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.**

228-438

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION - PRECAUCION**

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks.

Mixers and loaders must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks.
- Protective eyewear.

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.

USER SAFETY RECOMMENDATIONS

Users 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 outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

FIRST AID

IF SWALLOWED	<ul style="list-style-type: none"> • Call 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 the poison control center or doctor.
IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth- to-mouth. • Call a poison control center or doctor for further treatment advice.
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.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and should be avoided.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. To protect the environment, **DO NOT** allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. 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 if bees are visiting the treatment area.

**DIRECTIONS FOR USE
RESTRICTED USE PESTICIDE**

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.

DO NOT apply by any kind of irrigation system.

Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. **DO NOT** allow the product to enter any drain during or after application.

AGRICULTURE 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 intervals. 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.

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, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride 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 and greenhouses.

DO NOT allow people or pets on treated surfaces until the spray has dried.

APPLICATION INFORMATION, RESTRICTIONS, and LIMITATIONS

This product formulation mixes readily with water and other aqueous carriers, and controls a wide spectrum of insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in greenhouses and outdoor nurseries, and turf on golf courses and sod farms. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity during the season of application.

This product can be tank-mixed with other products, including insect growth regulators. When tank mixing this product with other products, observe all precautions and limitations on each separate product label. The addition of spreader stickers is not necessary. The physical compatibility of this product may vary with different sources of pesticide products, and local cultural practices. Prepare any tank mix which has not been previously tested on a small scale (pint or quart jar), using the proper proportions of chemicals and water to ensure the physical compatibility of the mixture.

Use the following procedure for preparation of a new tank mix, unless specified otherwise in label directions: (1) Add wettable powders to tank water, (2) Agitate, (3) Add liquids and flowables, (4) Agitate, (5) Add emulsifiable concentrates, and (6) Agitate. If a mixture is found to be incompatible following this order of addition, try reversing the order of addition, or increase the volume of water.

Note: If the tank-mixture is found to be compatible after increasing the amount of water, then the sprayer will need to be re-calibrated for a higher volume application. **DO NOT** allow tank mix to stand overnight.

Maximum rates: **DO NOT** apply more than 0.2 pound a.i./acre (40 fluid ounces of this product) in a single application or per year for outdoor applications.

Resistance: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product must conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representative or pest management advisor for the best alternative method of control for your area.

PRODUCT DILUTION CHART

APPLICATION VOLUME GALLONS PER ACRE	APPLICATION RATE: POUNDS A.I. PER ACRE	FLUID OUNCES* OF THIS PRODUCT DILUTED TO THESE VOLUMES OF FINISHED SPRAY			
		1 GALLON	25 GALLONS	50 GALLONS	100 GALLONS
50	0.025	0.1	2.5	5.0	10.0
50	0.05	0.2	5.0	10.0	20.0
50	0.1	0.4	10.0	20.0	40.0
50	0.2	0.8	20.0	40.0	80.0
100	0.025	0.05	1.25	2.5	5.0
100	0.05	0.1	2.5	5.0	10.0
100	0.1	0.2	5.0	10.0	20.0
100	0.2	0.4	10.0	20.0	40.0
150	0.025	0.03	0.83	1.67	3.3
150	0.05	0.07	1.67	3.33	6.7
150	0.1	0.13	3.33	6.67	13.3
150	0.2	0.27	6.67	13.33	26.7
200	0.025	0.025	0.63	1.25	2.5
200	0.05	0.05	1.25	2.5	5.0
200	0.1	0.1	2.5	5.0	10.0
200	0.2	0.2	5.0	10.0	20.0
250	0.025	-	0.5	1.0	2.0
250	0.05	-	1.0	2.0	4.0
250	0.1	-	2.0	4.0	8.0
250	0.2	-	4.0	8.0	16.0
300	0.025	-	0.42	0.83	1.7
300	0.05	-	0.83	1.67	3.3
300	0.1	-	1.67	3.33	6.7
300	0.2	-	3.33	6.67	13.3

*To convert to milliliters, multiply by 29.57.

1 fluid ounce = 29.57 ml = 2 tablespoons = 6 teaspoons.

DO NOT use household utensils to measure this product.

Formula for determining the active ingredient content of the finished spray mixture: Use the following formula to determine the percent active ingredient that is in the spray tank after mixing this product.

$$\frac{(7.9) \text{ (Fluid ounces of this product added to tank)}}{(128) \text{ (Gallons of finished spray mix)}} = \text{Percent active ingredient of spray mix}$$

80916

USE-SPECIFIC APPLICATION INSTRUCTIONS, RESTRICTIONS, and LIMITATIONS

ORNAMENTALS IN GREENHOUSES, LATH HOUSES, SHADE HOUSES AND OUTDOOR NURSERIES, INCLUDING NON-BEARING FRUIT AND NUT TREES

Apply 0.025 to 0.2 pounds a.i./acre (5 to 40 fluid ounces) of this product. This product can be diluted and applied in various volumes of water providing that the maximum label rate (0.2 pounds a.i./acre or 40 fluid ounces) is not exceeded (refer to Dilution Chart for specific instructions). Apply this product through low volume application equipment by dilution with water or other carriers and providing that the maximum label rate (0.2 pounds a.i./acre or 40 fluid ounces) is not exceeded.

ORNAMENTAL APPLICATION RATES

The application rates listed in the following table will provide control of the respective pests under typical conditions. However, at the discretion of the applicator, this product may be applied at up to 0.2 pounds a.i./acre (40 fluid ounces) to control each of the pests listed in this table.

PEST	APPLICATION RATE OF THIS PRODUCT	
	POUNDS A.I. PER ACRE	FLUID OUNCES PER 1,000 SQUARE FEET
Aphids Bagworms ¹ Cutworms Elm Leaf Beetles Fall Webworms Lace Bugs Leaf Feeding Caterpillars Plant Bugs (Including <i>Lygus</i> spp.) Tent Caterpillars	0.025 to 0.05	0.125 to 0.25
Beet Armyworm Black Vine Weevil (Adults) Brown Soft Scales Broad Mites Budworms California Red Scale (Crawlers) ² Centipedes Citrus Thrips Clover Mites Crickets Diaprepes (Adults) Earwigs European Red Mite Flea Beetles Fungus Gnats (Adults) Grasshoppers Gypsy Moth Caterpillars Leafhoppers Leafrollers Mealybugs Millipedes Mites Orchid Weevil Pillbugs Pine Needle Scales (Crawlers) ² San Jose Scales (Crawlers) ² Sowbugs Spider Mites Spiders Thrips Tip Moths	0.05 to 0.1	0.25 to 0.5

90A112

PEST	APPLICATION RATE OF THIS PRODUCT	
	POUNDS A.I. PER ACRE	FLUID OUNCES PER 1,000 SQUARE FEET
Twig Borers ² Weevils Whiteflies		
Ants Imported Fire Ants** Japanese Beetle (Adults) Leafminers Pecan Leaf Scorch Mite Pine Shoot Beetle (Adults)	0.1 to 0.2	0.5 to 1.0

¹**Bagworms:** Apply when larvae begin to hatch and spray larvae directly. Applications when larvae are young will be most effective.

²**Scale Crawlers and Twig Borers:** Treat trunks, stems and twigs in addition to plant foliage.

**For foraging ants.

Certain cultivars may be sensitive to the final spray solution. Treat a small number of plants and observe for one week prior to application to the entire planting.

Apply with ground equipment only.

DO NOT apply when wind direction favors downwind drift towards nearby water bodies.

DO NOT apply when wind velocity exceeds 10 mph. Avoid application when wind gusts approach 10 mph.

DO NOT apply when a temperature inversion exists.

Apply using the largest nozzle size compatible with adequate coverage.

DO NOT apply if rain is expected within 12 hours (or whatever time is necessary for the spray to dry).

DO NOT apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds. When treating tall trees (>15 feet) from the ground with high pressure sprays or during any application with air assisted equipment (mist blower) **DO NOT** apply within 150 feet of aquatic areas.

TURF (GOLF COURSES AND SOD FARMS)

NOT FOR USE ON SOD FARMS IN THE STATE OF NEW YORK

Apply this product as a surface or sub-surface treatment. Use application volumes of up to 10 gallons of solution per 1,000 square feet to get uniform coverage when treating dense and/or long grass foliage.

For low volume applications, less than 2 gallons/1,000 square feet, immediately irrigate treated area with at least 0.25 inches of water following application to ensure efficacy of sub-surface pests such as, but not limited to, mole crickets.

TURF APPLICATION RATES (Golf Courses and Sod Farms)

The application rates listed in the following table will provide control of the respective pests under typical conditions. However, at the discretion of the applicator, this product may be applied at up to 0.1 pounds a.i./acre (20 fluid ounces) to control each of the pests listed in this table. (0.2 pound a.i./acre or 40 fluid ounces of this product for Ants, Imported Fire Ants and Mole Crickets).

PEST	ACTIVE INGREDIENT POUNDS PER ACRE	APPLICATION RATE THIS PRODUCT	
Armyworms ¹ Cutworms ¹ Sod Webworm ²	0.05 pounds a.i. per acre	10 fluid ounces per acre	0.25 fluid ounce per 1,000 square feet
Annual Bluegrass Weevil (<i>Hyperodes</i>) (Adults) ² Ants Billbugs(Adult) ³ Black Turfgrass Ataenus (Adults) ⁴ Centipedes Chinch Bugs ⁵ Crickets Earwings Fleas (Adults) Grasshoppers Leafhoppers Mealybugs Millipedes Mites ⁶ Mole Cricket (Adults) ⁷ Mole Cricket (Nymphs) ⁸ Pillbugs Sowbugs	0.05 to 0.1 pounds a.i. per acre	10 to 20 fluid ounces per acre	0.25 to 0.5 fluid ounce per 1,000 square feet
Fleas (Larvae) ⁹ Imported Fire Ants Japanese Beetle (Adult)	0.1 pounds a.i. per acre	20 fluid ounces per acre	0.5 fluid ounce per 1,000 square feet
Ants Imported Fire Ants ¹¹ Mole Crickets	0.2 pounds a.i. ¹⁰ per acre	40 fluid ounce a.i. ¹⁰ per acre	1 fluid ounce ¹⁰ per 1,000 square feet

In New York State, DO NOT apply to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).

In New York State, make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

¹**Armyworms, Cutworms, and Sod Webworms:** To ensure optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the turf area is being maintained at a mowing height of greater than 1 inch, use higher application rates (Up to 0.1 pounds a.i./acre or 20 fluid ounces of this product) during periods of high pest pressure.

²**Annual Bluegrass Weevil (*Hyperodes*) adults:** Time applications to control adult weevils as they leave their over-wintering sites and move into turf areas. This movement generally begins when *Forsythia* is in full bloom and concludes when Flowering Dogwood (*Cornus florida*) is in bloom. Consult your State Cooperative Extension Service for more specific information regarding application timing.

³**Billbug adults:** Make applications when adult Billbugs are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for information specific to your region.

In temperate regions, spring applications targeting Billbug adults will also provide control of over-wintered Chinch Bugs.

⁴**Black Turfgrass Ataenius adults:** Make applications during May and July to control the first and second generation of Black Turfgrass Ataenius adults, respectively. Time May applications to coincide with the full bloom stage of Vanhoutte spiraea (*Spiraea vanhouttei*) and Horse Chestnut (*Aesculus hippocastanum*). Time

July application to coincide with the blooming of Rose of Sharon (*Hibiscus synacus*).

⁵Chinch Bugs: These bugs infest the base of turf plants and are often found in the thatch layer. Irrigation of the turf area before treatment will optimize the penetration of the insecticide to the area where the Chinch Bugs are located. Use higher volume applications if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch Bugs can be one of the most difficult pests to control in grasses and the higher application rates (up to 0.1 pound a.i./acre or 20 fluid ounces of this product) may be required to control populations that contain both nymphs and adults during the middle of the summer.

⁶Mites: To ensure optimal control of Eriophyid Mites, apply in combination with the labeled application rate of a surfactant. A second application, five to seven days after the first may be necessary to achieve control.

⁷Mole Cricket Adults: Achieving control of adult Mole Crickets is difficult because preferred turf areas are subject to continuous invasion during the early spring by this extremely active stage. Make applications as late in the day as possible and water in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the Mole Crickets closer to the soil surface where contact with the insecticide will be maximized. Treat turf areas that receive pressure from adult Mole Crickets at peak egg hatch to ensure control of subsequent nymph populations (see below).

⁸Mole Cricket Nymphs: Treat turf areas that receive intense adult Mole Cricket pressure in the spring immediately prior to peak egg hatch. Control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher application rates and more frequent applications to maintain acceptable control. Make applications as late in the day as possible and water in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the Mole Crickets closer to the soil surface where contact with the insecticide will be maximized.

⁹Flea larvae: Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher volume application when treating these areas to ensure penetration of the insecticide into the soil.

Note: if the lawn area is being treated with this product at 0.05 pound a.i./acre (10 fluid ounces) for adult flea control, then double the application volume to achieve the larval application rate.

¹⁰For large infestations of Ants, Imported Fire ants, and Mole Crickets, apply a single application of 0.2 pound a.i./acre (40 fluid ounces of this product) once per year.

¹¹Imported Fire Ants: Control will be optimized by combining broadcast applications that will control foraging workers and newly mated fly-in queens with mound drenches that will eliminate existing colonies. If the soil is not moist, then irrigate before application or use a high volume application. For broadcast treatments, apply 0.2 pound a.i./acre (40 fluid ounces of this product). Treat mounds by diluting 1 teaspoon of this product per gallon of water and applying 1 to 2 gallons of finished spray per mound. Treat mounds with sufficient force to break their apex and allow the insecticide solution to flow into the Ant tunnels. Treat a four-foot diameter circle around the mound. Apply in cool weather (65° - 80°F) or in early morning or late evening hours.

Note: a spray rig that is calibrated to apply 0.2 pound a.i./acre (40 fluid ounces) of this product in 5 gallons per 1,000 square feet contains the approximate dilution (1 teaspoon per gallon) that is required for Fire Ant mound drenches in the spray tank.

Apply with ground application equipment only (and apply with nozzles not more than two feet above the turf).

DO NOT apply when wind conditions favor downward drift to nearby water bodies.

DO NOT apply when wind velocity exceeds 10 mph.

Avoid application when wind gusts approach 10 mph.

DO NOT apply when temperature inversion exists.

Apply using nozzles that provide the largest droplet size compatible with adequate coverage.

DO NOT apply for surface feeding pests if rain is expected within 12 hours (or whatever time is necessary for

the spray to dry).

DO NOT apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

DO NOT apply when turf grass areas are water-logged or soil is saturated with water (i.e. will not accept irrigation).

IMPORTED FIRE ANT QUARANTINE TREATMENT

Against Imported Fire ants (IFA) in potting media (including balled and containerized nursery grown ornamental trees, shrubs, plants, flowers, conifers, bushes, Christmas trees, and non-bearing fruit and nut-trees). This product is approved and can be used in accordance with the USDA Imported Fire Ant Quarantine Program. Apply this product by soil incorporation, as a topical application, or as a high volume drench treatment.

Soil Incorporation: Incorporate the appropriate volume of this product (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. The applications are based on the dry bulk density of the potting media. When used in accordance with USDA guidelines, this application will provide a 6-month certification period.

SOIL INCORPORATION RATE OF THIS PRODUCT FOR CONTROL OF IFA IN POTTING MEDIA

POTTING MEDIA BULK DENSITY (POUNDS CUBIC YARD)	FLUID OUNCES OF THIS PRODUCT IN ONE CUBIC YARD
200	1.9
400	3.8
600	5.7
800	7.6
1,000	9.5
1,200	11.4
1,400	13.3

Use proportional amounts of this product for potting media with bulk densities not listed.

Topical Application: Mix this product in 1,000 ounces of water based on container size and bulk density of the potting media (see table below). Apply one (1) ounce of the mix to each container evenly distributed over the surface of the potting media. Irrigate all treated containers with 1.5 inches of water following application. When used in accordance with USDA guidelines, this application will provide a 6-month certification period.

TOPICAL DRENCH APPLICATION RATE OF THIS PRODUCT FOR CONTROL OF IFA IN POTTING MEDIA

POTTING MEDIA BULK DENSITY (POUNDS CUBIC YARD)	FLUID OUNCES OF THIS PRODUCT PER 1,000 OUNCES OF WATER	
	3 QUART CONTAINER	4 QUART CONTAINER
200	3.6	5.2
400	7.2	10.4
600	10.8	15.6
800	14.4	20.8
1,000	18.0	26.0
1,200	21.6	31.2
1,400	25.2	36.4

Use proportional amounts of this product for potting media with bulk densities not listed.

High Volume Drench: Apply this product as a high volume drench by mixing the appropriate amount of product based on the bulk density in 100 gallons of water (see table below). Apply mix to individual containers to the point of saturation. The amount of mix used for each plant is generally 1/5 volume of the container. When used in accordance with USDA guidelines, this application will provide a 6-month certification period.

HIGH DRENCH APPLICATION RATE OF THIS PRODUCT FOR CONTROL OF IFA IN POTTING MEDIA

POTTING MEDIA BULK DENSITY (POUNDS CUBIC YARD)	FLUID OUNCES OF THIS PRODUCT IN 100 GALLONS
200	2.4
400	4.8
600	7.2
800	9.6
1,000	12.0
1,200	14.4
1,400	16.8

Use proportional amounts of this product for potting media with bulk densities not listed.

LARVAL CONTROL IN POTTING MEDIA OF CONTAINERIZED PLANTS

Black Vine Weevil Larval Control - Preventative Treatment Topical Drench: For preventative control of Black Vine Weevil larvae in containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Treat the media to the point of saturation, using 1/5 the volume of the container. Diluting 10 fluid ounces of the product per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide Black Vine Weevil Larval control for one growing season when the application is made in the spring. Diluting 20 to 40 fluid ounces of this product per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide Black Vine Weevil larval control for two growing seasons when the application is made in the spring.

White Grub Control - Preventative Treatment - Topical Drench: For preventative control of White Grubs (including, but not limited to, Japanese Beetle, Oriental Beetle and European Chafer) in containerized plants, dilute this product at the rate of 40 to 80 fluid ounces (0.2 to 0.4 pound a.i.) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Treat the media to the point of saturation, using 1/5 the volume of the container. Use the higher application rate for a longer period of control.

Black Vine Weevil and White Grub Larval Control - Preventative Treatment - Media Incorporation: For preventative control of Black Vine Weevil and White Grub Larvae in containerized plants, incorporate the appropriate volume of this product (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. Use the higher application rates for longer periods of control.

POTTING MEDIA BULK DENSITY (POUNDS CUBIC YARD)	FLUID OUNCES OF THIS PRODUCT IN ONE CUBIC YARD			
	10 PPM	15 PPM	20 PPM	25 PPM
200	0.4	0.6	0.8	1.0
300	0.6	0.9	1.2	1.5
400	0.8	1.2	1.6	2.0
500	1.0	1.5	2.0	2.5
600	1.2	1.8	2.4	3.0
700	1.4	2.1	2.8	3.5
800	1.6	2.4	3.2	4.0
900	1.8	2.7	3.6	4.5
1,000	2.0	3.0	4.0	5.0

The application rates listed above are based on the dry bulk density of the potting media. Use proportional volumes of this product for potting media with dry bulk densities that are not listed above.

Black Vine Weevil Larval Control - Curative Treatment - Topical Drench: To control Black Vine Weevil Larvae infesting containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Treat the media to the point of saturation using 1/5 the volume of the container.

Bare-root Treatment for Preventative Root Weevil Larval Control: To protect treated roots of field grown nursery stock from feeding by Root Weevil Larvae, dilute one gallon of this product in 100 gallons of water and treat the bard roots of plants that are being transplanted into the field either by dipping the roots into the insecticide solution for ten seconds or by spraying the insecticide solution onto the roots.

Diaprepes Weevil Larval Control - Curative Treatment - Tropical Drench: To control Diaprepes Weevil Larvae infesting containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Treat the media to the point of saturation using 1/5 the volume of the container.

Fungus Gnat Larval Control - Preventative Treatment - Topical Drench: For preventative control of Fungus Gnat Larvae in containerized plants, dilute this product at the rate of 20 to 40 fluid ounces (0.1 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Treat the media to the point of saturation using 1/5 the volume of the container. Use the higher application rate for a longer period of control.

Fungus Gnat Larval Control - Curative Treatment - Topical Drench: To control Fungus Gnat Larvae infesting containerized plants, dilute this product at the rate of 10 to 40 fluid ounces (0.05 to 0.2 pound a.i.) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Treat the media to the point of saturation using 1/5 the volume of the container.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly.

DO NOT put concentrate or dilute material into food or drink container. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

To Confine Spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. **DO NOT** contaminate water, food or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Dispose of excess or waste pesticide by use according to label directions, or contact your State pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

[Nonrefillable Containers 5 Gallons or Less:]

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance. If burned stay out of smoke.

[Nonrefillable containers larger than 5 Gallons:]

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning is not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance. If burned stay out of smoke. Triple rinse or pressure 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 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

[Refillable containers]

CONTAINER HANDLING [DISPOSAL]: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

[Refillable For return to Nufarm:]

CONTAINER HANDLING [DISPOSAL]: Refillable Container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Close all openings and replace all caps. Contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

1160f16

DEALERS MUST SELL IN ORIGINAL PACKAGE ONLY

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV090310)

_____ is a registered trademark of Nufarm Americas Inc.

All other trademarks are the property of their respective owners.