12/5/2007

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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SAVIAN DAL PROT

Agriguard Company, LLC % Alan C. Katz President toXcel, LLC P.O. Box 363 Gainesville, VA 20156

DEC 5 2007

Subject:

Agriguard Multiguard<sup>®</sup> Protect EPA Reg. No. 75753-1 Your Amendment dated August 16, 2007 EPA Decision Number 384004

Dear Mr. Katz:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable

One copy of the label stamped "Accepted with comments" is enclosed for your records. Please submit one copy of the final printed label before the product is released for shipment.

If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,

Mary J. Waller

Mary L. Waller Product Manager (21) Fungicide Branch Registration Division (7505P)

Enclosure

Center panel

# **AGRIGUARD MULTIGUARD<sup>®</sup> PROTECT**

# (FUMIGANT FOR USE IN FULLY ENCLOSED STRUCTURES ONLY)

When used as directed, MULTIGUARD<sup>®</sup> PROTECT controls root infesting plant parasitic nematodes, and fungal plant diseases such as species of *Pythium*, *Phytophthora*, *Fusarium* and *Rhizoctonia*.

Active Ingredient (by weigh	t)
Furfural	90.0%
Other Ingredients	10.0%
TOTAL	100.0%

12/5/2007

[12-05-07]

Under the Vederal Insectistica, Fundicide, and Rodenticide Act, as amended, for the pesticide registered under BPA Reg. No. 75753 - 1

1 gallon of MULTIGUARD<sup>®</sup> PROTECT contains 8.68 lbs furfural 1 gallon of MULTIGUARD<sup>®</sup> PROTECT weighs 9.65 lbs at 68°F

# KEEP OUT OF REACH OF CHILDREN WARNING – AVISO

#### 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.)

	FIRST AID		
If on Skin	• Take off contaminated clothing.		
or Clothing	• Rinse skin immediately with plenty of water for 15-20 minutes.		
	• Call a poison control center or doctor for treatment advice.		
If in Eyes	• Hold eye open and rinse slowly and gently with water for 15-20 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.		
If	• Call a poison control center or doctor immediately for treatment advice.		
Swallowed	• 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.		
	• Do not give anything by mouth to an unconscious person.		
If Inhaled	• Move person to fresh air.		
	• If person is not breathing, call 911 or ambulance, then give artificial		
	respiration, preferably by mouth-to-mouth, if possible.		
	Call a poison control center or doctor for further treatment advice		
HOTLINE	NUMBER: CHEMTREC 1-800-424-9300 (24 hours) or (908)272-7070		
Have the pro	duct container or label with you when calling a poison control center or		
doctor, or go	ing for treatment. You may also contact 1-800-222-1222 for emergency		
medical treat	ment information.		
NOTE TO I	<b>PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of		
gastric lavage.			

Center panel (Continued)

# SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

Manufactured for Agriguard Company, LLC Centennial Plaza, Suite 100, 186 North Avenue East, Cranford, NJ 07016

# EPA Registration No. 75753-1

EPA Establishment No. 48450-TX-01

7 12

Net Contents: \_\_\_ gal.

Left panel

#### PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO

4712

May be fatal if swallowed or absorbed through the skin. Harmful if inhaled. Causes substantial but temporary eye injury. Do not breathe vapors. Do not get in eyes, or skin, or on clothing. Irritating to skin and respiratory tract. Inhalation may cause headache, nausea and central nervous system depression.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Pesticide handlers must wear coveralls over short-sleeved shirt and short pants, chemical-resistant footwear and socks, chemical-resistant gloves such as nitrile, butyl, neoprene, and/or barrier laminate, and protective eyewear (goggles or face shield). When mixing/loading or cleaning equipment, use a chemical-resistant apron. For overhead exposure, wear chemical-resistant headgear.

Follow the manufacturer's instructions for clean/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **USER SAFETY RECOMMENDATIONS**

- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing /PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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 pesticide is toxic to birds and harmful to the aquatic environment. 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 wash waters or rinsate.

#### PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame. Can be degraded by contact with acids or bases. Keep away from ignition sources. **DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER**.

Do not apply this product in or on electrical equipment due to the possibility of shock hazard.

Furfural is a combustible, yellow liquid that turns reddish-brown upon exposure to light and air, and possesses a heavy almond-like odor. Vapors are heavier than air and may travel to a source of ignition and flash back. Hazardous polymerization may occur if heated or catalyzed.

Left panel (Continued)

#### WARRANTY

Seller warrants that the product, as is, conforms to its chemical description and when used according to label directions, it is reasonably fit for the purpose stated on the label. Seller makes no other warranty, either expressed or implied, of merchantability or of fitness for a particular purpose or otherwise, and to the extent consistent with applicable law, all risks are assumed by buyer.

#### Right panel

#### **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, consult the agency in your State responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment, restricted-entry interval, and notification of workers.

#### **ENTRY RESTRICTIONS**

Do not enter or allow worker entry into treated area during the restricted entry interval (REI) of 9 days for cut flowers and 12 hours for containerized ornamentals. Personal Protective Equipment 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, includes coveralls worn over short-sleeved shirt and or pants, chemical-resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate), and chemical-resistant footwear plus socks.

#### **Entry Restrictions into the Buffer Zones**

- From the start of the application until 12 hours after the application has ended, the applicator shall prohibit persons and domestic animals from being present in areas adjacent to the greenhouse where treatment has occurred. These adjacent areas are referred to as the Buffer Zone.
- A buffer zone shall extend from the edge of the greenhouse in all directions, to a distance of 90 feet for greenhouses less than 5,000 square feet and 300 feet for greenhouses equal to or greater than 5,000 square feet. If a treatment occurs in an enclosed area within a greenhouse (defined as an area including the ventilation system which is completely sealed off from all other areas of the greenhouse), then the enclosed area will be treated as "the greenhouse" and the buffer zone shall be calculated from the edge of the enclosed treated area.

Any activity which results in a person being present within the buffer zone during the 12 hour period following application is prohibited unless the task is permitted under the WPS. Correctly trained handlers wearing appropriate PPE and performing a task that is permitted by this labeling may enter inside the buffer zone. Examples of activities that are prohibited are work or recreation within a buffer zone, or occupation of structures that are within a buffer zone while the buffer zone is in effect. Examples of activities that are not prohibited are driving past the greenhouse where the treatment has occurred or occupying a structure that is not within the buffer zone.

#### **NOTIFICATION AT ENTRANCES TO GREENHOUSE AND BUFFER ZONES**

Notify all workers of the fumigation verbally and by posting warning signs at entrances to greenhouses where treatment has occurred and at the edge of buffer zones. The signs must bear the skull and crossbones symbol and state:

- (1) "DANGER/PELIGRO"
- (2) "Areas under fumigation, DO NOT ENTER/NO ENTRE"
- (3) Furfural Fumigant in Use
- (4) Date and time of fumigation
- (5) Name of this product and
- (6) Name, address, and telephone number of the applicator.

Post these fumigant warning signs instead of the WPS signs for these applications, but follow all WPS requirements pertaining to location, legibility, size and timing of posting and removal. These fumigant warning signs shall be posted at the entrances to greenhouses for no less than 9 days for cut flower treatments and 12 hours for containerized ornamental treatments. These fumigant warning signs shall be posted at the edge of the buffer zones for no less than 12 hours. Comply with all local ordinances and regulations.

All uses of this product are covered under the Worker Protection Standard (WPS) and must be conducted in accordance with all the requirements of the WPS, 40 CFR part 170. This product is intended for commercial agricultural use and research only, and not for interiorscapes (e.g., malls, offices), conservatories or arboretums where agricultural plants are present for aesthetic of climatic modification. For use in growing media and/or soils in greenhouses for cut flowers, cut greens, transplants, propagative materials, ornamentals and other non-food/non-feed commodities. The term greenhouse includes any enclosed structure type with a nonporous covering and is large enough to allow a person to enter. When used as directed, MULTIGUARD<sup>®</sup> PROTECT controls root infesting plant parasitic nematodes and fungal plant diseases such as *Phythium, Phytophthora*, *Fusarium* and *Rhizoctonia*.

# APPLICATION REQUIREMENTS

A minimum greenhouse ventilation rate of at least 90 air changes per hour is required during mixing/loading and application and for at least 48 hours following application of MULTIGUARD<sup>®</sup> PROTECT.

Land within buffer zones must belong to the owner/operator of the greenhouse. The applicator must verify that the owner/operator of the greenhouse owns or has control of sufficient acreage surrounding the greenhouse to satisfy the buffer zone requirements and to ensure that no unprotected persons will be in the buffer zone area during the restricted entry interval.

Mixing/loading must be done outdoors or in a well-ventilated area.

Do not use MULTIGUARD<sup>®</sup> PROTECT on sterile soil.

### MIXING AND APPLICATION

For Drip Irrigation applications transfer the product to the blending tank, pre-mix the MULTIGUARD<sup>®</sup> PROTECT in water and apply through tubes directly into pots or through drip tapes installed either on the flat soil surface or on pre-formed bed tops. Applications may be made with or without plastic mulch. Apply in sufficient water to obtain wetting across the treated area and to move the MULTIGUARD<sup>®</sup> PROTECT down throughout - the growing media where root growth is present.

For spray boom and sprinkler applications, apply at a concentration no greater than 10% MULTIGUARD<sup>®</sup> PROTECT in water. When pre-mixing before application, begin by adding water to the mixing tank and add the prescribed amount of MULTIGUARD<sup>®</sup> PROTECT. MULTIGUARD<sup>®</sup> PROTECT forms an emulsion at concentrations of 10% or less provided the tank mixture is agitated during the application process. By-pass or mechanical agitation is required for MULTIGUARD<sup>®</sup> PROTECT use.

The liquid MULTIGUARD<sup>®</sup> PROTECT formulation is supplied in 1 quart, 1 gallon, 5 gallon containers or in 30 gallon drums. For 1 quart, 1 gallon and 5 gallon containers an open pour system may be used. When using the 30 gallon drums, pump the formulation from the drum to the application equipment.

### **APPLICATION THROUGH IRRIGATION EQUIPMENT**

- 1. Apply this product only through overhead sprinkler system or drip (trickle)] irrigation. Do not apply this product through any other type of irrigation system.
- 2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Connection of the irrigation system. to a public water system is not recommunded, however if the irrigation system is connected to the public system:

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream form the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be
- discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

For Overhead Sprinkler Chemigation

- 1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally dosed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

For Drip (trickle) Irrigation:

- 1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from

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being withdrawn from the supply tank when the irrigation system is sither automatically or manually shut down.

- 4. The system must contain functional inter-locking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

### POST-PLANT APPLICATIONS TO PLANTS GROWN IN PROPAGATION BEDS

Water-in the MULTIGUARD<sup>®</sup> PROTECT through tubes or drip tapes at 5.2 gallons per treated acre (0.103 gal/1000 sq ft, or 45 lb ai/a). This application method moves the MULTIGUARD<sup>®</sup> PROTECT into the plant root zone. Use sufficient drip lines to give complete coverage of the planting bed. Prior to application, MULTIGUARD<sup>®</sup> PROTECT should be diluted at least 1:9 with water. Dilution at less than 1:9 may be made if the mix tank has adequate mechanical and/or bypass agitation to keep the mixture in suspension. The recommended application rate represents 5.0 gallons of the product in 45 gallons of water. Apply 4-8 applications per crop at 14-28 day intervals. Post-plant applications control plant parasitic nematodes and certain fungal diseases.

## **DRENCH APPLICATIONS**

MULTIGUARD<sup>®</sup> PROTECT may be used as a pre-plant or post-plant drench for the control of stem and root diseases in potted plants. Begin applications before the plants become infested. Apply as a full pot drench at 3.0-12.0 fl oz. in 100 gallons of water, on a 7-28 day schedule throughout the growing season. The 12 fl oz/100 gallons of water should be used when high infestation levels are expected. Normally the 14 to 28 day application schedules is acceptable, however the 7 day application schedules should be used if high levels of infestations are expected or there has been a history of high levels of infestation. Apply the solution until it begins to drip through the bottom of the pots. For most potting media there needs to be at least 1 pint of drench is equivalent to 125 gallons of water/1000 ft<sup>2</sup>. For deeper pots the amount of drenching solution should be increased to maintain this ratio of drench solution to potting media volume in order to obtain complete movement through the potting media.

### DRIP IRRIGATION WATER OR FERTILIZER SOLUTION APPLICATIONS

MULTIGUARD<sup>®</sup> PROTECT can be watered into the growing media through drip irrigation systems. Prepare a stock solution of 1 gallon of product in 99 gallons of water or liquid fertilizer and inject it into the irrigation stream at a 1:200 ratio during each irrigation cycle. This dilution gives a final concentration of 50 ppm of furfural in the irrigation water and if 125 gallons of water is applied/1000 ft<sup>2</sup> of surface area the use rate of Multiguard Protect is 0.75 fl oz /1000 ft<sup>2</sup> for each irrigation. If another injection ratio is used, adjust the concentration of MULTIGUARD<sup>®</sup> PROTECT in the stock solution appropriately. This use controls the nematodes and fungal diseases listed on this label. Do not inject MULTIGUARD<sup>®</sup> PROTECT into the drip irrigation system for the first and last hour of the irrigation session.

# OVER-THE-TOP APPLICA, IONS WITH SPRAY BOOM OR OVERHEAD IRRIGATION SYSTEM.

MULTIGUARD<sup>®</sup> PROTECT may be applied over the top of the plant canopy with either a spray boom or irrigation system. Applications should begin prior to plants becoming infested. Apply MULTIGUARD<sup>®</sup> PROTECT at 3.75 to 15 fl oz/1000 ft<sup>2</sup> of plant/potting media surface in a minimum of 20 gallons solution per 1000 ft<sup>2</sup> on a 7-28 day schedule throughout the growing season. The 15 fl oz/1000 ft<sup>2</sup> rate should be used when high infestation levels are expected. Normally the 14 to 28 day application schedule is acceptable, however the 7 day application schedule should be used if high levels of infestations are expected or there has been a history of high levels of infestation. Immediately after the application, irrigation water that does not contain MULTIGUARD<sup>®</sup> PROTECT should be applied over the plant canopy to water-in the MULTIGUARD<sup>®</sup> PROTECT, giving a total of at least 125 gallons of water/1000 ft<sup>2</sup> of plant canopy/potting media surface. For the MULTIGUARD<sup>®</sup> PROTECT to be effective at controlling the soil pathogens/nematodes, it must be moved into the plant root zone.

### SPOT TREATMENTS WITH LOW PRESSURE BACK PACK SPRAYER

MULTIGUARD<sup>®</sup> PROTECT may be applied over the top of the plant canopy with a low pressure back pack type sprayer. Applications should begin prior to plants becoming infested. Apply MULTIGUARD<sup>®</sup> PROTECT at 3.75 to 15 fl oz/ 1000 ft<sup>2</sup> of plant/potting media surface in a minimum of 20 gallons solution per 1000 ft<sup>2</sup> on a 7-28 day schedule throughout the growing season. The 15 fl oz/1000 ft<sup>2</sup> rate should be used when high infestation levels are expected. Normally the 14 to 28 day application schedule is acceptable, however the 7 day application schedule should be used if high levels of infestations are expected or there has been a history of high levels of infestation. Immediately after the MULTIGUARD<sup>®</sup> PROTECT application additional irrigation water that does not contain MULTIGUARD<sup>®</sup> PROTECT should be applied over the plant canopy to water-in the MULTIGUARD<sup>®</sup> PROTECT, giving a total of at least 125 gallons of water/1000 ft<sup>2</sup> of plant canopy/potting media surface. For the MULTIGUARD<sup>®</sup> PROTECT to be effective at controlling the soil diseases/nematodes, it must be moved into the plant root zone

A single applicator must not apply spot treatments to an area of more than 2,000 ft<sup>2</sup> per day using hand-held methods for application of MULTIGUARD<sup>®</sup> PROTECT.

Ornamentals that have been shown to be tolerant of MULTIGUARD<sup>®</sup> PROTECT post-plant drench applications at 12.0 fl oz/100 gallons:

Ageratum	Dusty miller	Portulaca
Angelonia	Exacum	Salvia
Asparagus Fern	Gazania	Spathiphyllum
Begonia	Geranium	Torena
Blue Daze	Hypoestes	Vinca
Caladium	Marigold	
Calibrachoa	Mexican Heather	
Croton	Platycodon	
Dahlia	Poinsettia	

This product may cause injury to the following ornamentals.

Celosia Coleus New Guinea Impatiens Lisanthus Petunia **Do not use on Leather leaf fern** 

### NOTICE TO USER REGARDING DRENCH, DRIP, AND OVER-THE-TOP TREATMENTS:

Plant tolerance to MULTIGUARD<sup>®</sup> PROTECT has been found to be acceptable for the crops listed on this label, except where noted above. Due to the large number of species and cultivars of ornamentals and nursery plants, it is impractical to evaluate the safety of all species and cultivars to MULTIGUARD<sup>®</sup> PROTECT. Neither the manufacturer nor the Seller has determined if MULTIGUARD<sup>®</sup> PROTECT can be used safely on ornamental plants not listed on this label. The professional user should determine if MULTIGUARD<sup>®</sup> PROTECT can be used safely on ornamental plants not listed on this label prior to commercial use. Test the recommended rates on a small number of plants to determine crop safety prior to widespread use.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** The color of furfural turns to red-brown during storage. The substance affects many synthetic materials; store only in original packing. Separate from oxidants, strong acids and strong bases. Store in cool, dark, ventilated area away from ignition sources.

**Pesticide Disposal:** Substance Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, application mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Disposal:** Triple rinse (or equivalent) empty containers. 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.