JUNTED STATES	EPA Reg. Number:	Date of Issuance:			
A SEN OF THE STATES TO THE STA	75753-1	11/14/16			
U.S. ENVIRONMENTAL PROTECTION AGENCY					
Office of Pesticide Programs Registration Division (7505P)	<b>Expiration Date:</b> 9/2/2022				
1200 Pennsylvania Ave., N.W. Washington, D.C. 20460	Term of Issuance:				
NOTICE OF PESTICIDE:	Conditional				
X Registration Reregistration	Name of Pesticide Prod	uct:			
(under FIFRA, as amended)	Multiguard Prote	ect			
Name and Address of Registrant (include ZIP Code):  Agriguard Company, LLC  186 N. Ave. East (Centennial Plaza)  Cranford, NJ 07016  C/O Jane Eickhoff  ToXcel Toxicology and Regulatory Affair 7140 Heritage Village Plaza  Gainesville, VA 20155-3061					
Note: Changes in labeling differing in substance from that accepted in connection with the Registration Division prior to use of the label in commerce. In any correspondence on the label in commerce.					
On the basis of information furnished by the registrant, the under the Federal Insecticide, Fungicide and Rodenticide A	<u>-</u>	hereby registered			
Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.					
This product is conditionally registered in accordance with FIFRA section 3(c)(7)(B) for a limited period of time. This registration will automatically expire September 2, 2022 except as described below:					
1 A griguard has indicated that it may about to	o sools a gamaan raassaaana	nt that apuld allow			

1. Agriguard has indicated that it may choose to seek a cancer reassessment that could allow EPA to remove or extend the expiration date. If Agriguard submits study protocols or additional data in accordance with the following schedule and EPA fails to complete its review/reassessment within the designated PRIA timeframe, the expiration date will toll day by day as described further below:

Signature of Approving Official:	Date:
Cofgiles-Parker	11/14/16
Cynthia Giles-Parker, Chief	
Fungicide Branch, Registration Division (7505P)	

- o In order for EPA to determine whether additional data (e.g. a mouse feeding study) would be beneficial for a cancer reassessment, Agriguard will submit a mouse kidney and a rat nasal inhalation study for furfuryl alcohol by December 31, 2018; these studies will be reviewed upon submission under PRIA category R124 or its successor. The previously submitted (January, 2015) report by an independent Pathology Working Group (PWG), will also be reviewed under a separate PRIA category R124 upon submission of the rat nasal or mouse kidney MOA study.
- Agriguard will submit an application for a cancer reassessment by March 1, 2021 under PRIA category R370.
- To ensure both of these deadlines can be met, interim steps will follow the timeline described in the attached schedule, "Predicted Mode of Action Studies Timeline."
   Standard PRIA fees and timelines apply to submissions covered by PRIA.
- 2. If the PRIA actions listed above are not submitted per the schedule, EPA, may, at its sole discretion, allow the registration to expire on September 2, 2022. If the submission of the cancer Mode of Action (MOA) studies is delayed by a disease outbreak involving the mice or rats during study execution or other circumstances that EPA agrees could not have been foreseen by, or are outside the control of, Agriguard, the expiration date will toll day by day with the extension not to exceed 12 months.
- 3. EPA will notify Agriguard of its decision on the cancer reassessment by email followed by a mailed letter. The date of the email notification will be considered the date of EPA's notification for the purposes of these terms.
- 4. Upon notification of an EPA determination to retain the current cancer classification and Q\* (as described in HED's June 7, 2016 Human Health Risk Assessment), this registration shall expire on September 2, 2022 or the day EPA makes its determination, whichever is later.
- 5. Upon notification of an EPA determination to change the cancer classification or Q\* in a way that lessens the estimated risk of cancer, Agriguard may within 30 days request an amendment to the registration to remove or extend the time-limitation. If no amendment request is received within that timeframe, the registration will expire on September 2, 2022 or the 31<sup>st</sup> day after EPA's notification, whichever is later.

In addition, you must comply with the following conditions:

- 6. Submit and/or cite all data required for registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.
- 7. You are required to comply with the data requirements described in the DCI identified below:
  - a. Furfural GDCI-043301-1560

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You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <a href="http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1">http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1</a>

- 8. Submit one copy of the final printed label for the record before you release the product for shipment.
- 9. Submit by February 15<sup>th</sup> of each year data on the annual shipment quantity (gallons) of Multiguard Protect for the previous calendar year.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy the conditions listed above in paragraphs 6 through 8, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product confirms acceptance of all of the terms and conditions described above. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 7/23/2013
- Alternate CSF 1 dated 7/23/2013

If you have any questions, please contact Hope Johnson by phone at 703-305-5410, or via email at johnson.hope@epa.gov.

Enclosures stamped "accepted" label

Timeline for MOA data

### Predicted Mode of Action Studies Timeline

Activity	Predicted Timing
Protocol preparation for Mouse Kidney and Rat Nasal Furfuryl Alcohol Mode of Action (MOA) studies	December 31, 2016
Furfuryl Alcohol MOA protocols review by EPA	Q1,2017
Finalization of protocols by EPA	March 31, 2017
Review final protocols and scheduling details with laboratories and consulting target organ specialist(s).	Q2, 2017 – Q3-2017
Mouse Kidney and Rat Nasal Furfuryl alcohol MOA Studies	Q4, 2017 – Q3, 2018
Submit Mouse Kidney and Rat Nasal Furfuryl alcohol MOA Studies;	December 31, 2018
Submit protocol for Mouse Liver Furfural MOA study for EPA review.	December 31 ,2018
Finalize protocol; review final protocol and scheduling details with lab and consulting target organ specialist.	Q1, 2019 – Q2, 2019
Receive EPA R124 review of the Mouse Kidney and Rat Nasal Furfuryl Alcohol MOA studies, evaluate whether furfural MOA study is needed.	June 30, 2019
Mouse liver Furfural MOA study, if needed.	Q3, 2019 – Q2, 2020
Submit Mouse liver Furfural MOA study	September 30, 2020

#### MULTIGUARD PROTECT®

For commercial greenhouse ornamental use, pre-plant bare soil use (outdoors) on listed commodities, and terrestrial (outdoor) non-food use on field grown plants/ornamentals (including non-bearing fruit trees and vines and cut flowers) and on established turf on golf course tees and greens, practice greens, athletic fields, and spot treatment of fairways, roughs and turf/sod farms. When used as directed, MULTIGUARD PROTECT® controls root infesting plant parasitic nematodes, and suppresses fungal plant diseases such as species of *Pythium*, Phytophthora, Fusarium and Rhizoctonia.

> Active Ingredient (by weight) Furfural..... 90.0% Other Ingredients............ 10.0% TOTAL......100.0%

1 gallon of MULTIGUARD PROTECT® contains 8.68 lbs furfural 1 gallon of MULTIGUARD 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 Swallowed	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 so by the poison control center or doctor.				
	• Do not give anything by mouth to an unconscious person.				
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.				
	Call a poison control center or doctor for treatment advice.				
If on Skin or	Take off contaminated clothing.				
Clothing	• Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a poison control center or doctor for treatment advice.				
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)					
Have the product container or label with you when calling a poison control center or doctor, or going for					

#### SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS

treatment. You may also contact 1-800-222-1222 for emergency medical treatment information. **NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

Manufactured for Agriguard Company, LLC

Centennial Plaza, Suite 100, 186 North Avenue East, Cranford, NJ 07016

EPA Registration No. 75753-1 Establishment No. 34704-MS-02

Net Contents: \_\_ gal.

ACCEPTED 11/14/2016

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

75753-1

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

May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through the skin. Harmful if inhaled. Avoid breathing spray mist. Do not get in eyes, or on clothing. Avoid contact with skin. Inhalation may cause headache, nausea and central nervous system depression.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are nitrile rubber, butyl rubber, neoprene rubber, and/or barrier laminate.

- •Applicators and other handlers except mixers/loaders must wear long-sleeved shirt and long pants, shoes and socks, and chemical-resistant gloves (nitrile, butyl, or neoprene rubber, and/or barrier laminate), and protective eyewear (goggles, face shield or safety glasses).
- •For applications made with hand-held equipment, handlers (mixers, loaders, applicators) must additionally wear coveralls.
- •When mixing/loading or cleaning equipment, handlers must wear a long-sleeved shirt and long pants, shoes, socks and a chemical-resistant apron.
- •For overhead exposure, wear chemical-resistant headgear.
- •For pre-plant bare soil applications, a closed system that meets the criteria in 40 CFR 170.607 (d)(2) and (d)(3) is required. Protective eyewear must be worn when using closed systems operating under pressure.

Remove and wash contaminated clothing before reuse. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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.

**Engineering Controls** 

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements of Worker Protection Standards (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

- Users should wash hands thoroughly 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. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the high water mark.

Do not apply when weather conditions favor drift from treated areas. Drift or runoff from treated areas may be harmful to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

#### Surface and Groundwater Advisory

Furfural has certain properties and characteristics associated with chemicals detected in groundwater. Furfural residues may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow. Furfural may also impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This chemical is classified as having high potential for reaching surface water via runoff. To prevent leaching and runoff, untarped applications may only occur when heavy rainfall (e.g., thunderstorms or steady rain) is not expected the day of application or the 12 hours following application, whichever is later.

#### 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 volatile, combustible, yellow liquid that turns reddish-brown upon exposure to light and air, and possess 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.

#### **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 in your State responsible for pesticide regulation.

#### PRODUCT INFORMATION

#### **Product Information**

MULTIGUARD PROTECT® may only be used on established turf on athletic fields, golf course tees, greens, and practice greens; for spot treatment of fairways, roughs and turf/sod farms; on field grown plants/ornamentals (including non-bearing fruit trees and vines and cut flowers); ornamentals grown in commercial greenhouses; and pre-plant bare soil use (outdoors) for specified non-food uses. The following commodities are considered non-food uses when MULTIGUARD PROTECT® is applied pre-planting to bare soil: fruiting vegetables, cucurbits, citrus, pome fruits, stone fruits, berries and tree nuts (Crop Groups 8, 9, 10, 11, 12, 13 and 14, respectively). The directions for athletic fields and golf course use (non-agricultural uses) are found in Section I and directions for turf/sod farms, outdoor and greenhouse ornamental use (agricultural uses) and bare soil use are found in Section II. When used as directed, MULTIGUARD PROTECT® controls root infesting plant parasitic nematodes, and suppresses fungal plant diseases such as species of *Pythium*, *Phytophthora*, *Fusarium* and *Rhizoctonia*.

The volatile properties of this pesticide can pose a risk of temporary nasal irritation from inhalation exposure if present in the treatment area or buffer zone during an application or during the buffer zone entry restricted period.

The liquid MULTIGUARD PROTECT® formulation is supplied in 1 quart, 1 gallon, 2.5 gallon, 5 gallon containers, 30 gallon drums or Intermediate Bulk Container (IBC) totes up to 275 gallons. For 1 quart, 1 gallon, 2.5 gallon and 5 gallon containers an open pour system may be used. When using the 30 gallon drums or IBC totes, pump and/or induct the formulation from the drum or container to the application equipment.

#### **Product Precautions**

• Handle this pesticide in the open, with the operator "upwind" from the container where there is good ventilation.

#### **Product Use Restrictions**

#### **USE**

Comply with all local regulations and ordinances. Obtain an application permit from Agricultural Regulatory Agencies if required.

Keep pets, livestock, and other domestic animals out of the treated area and buffer zone during application and entry restricted period.

#### **BUFFER ZONES**

MULTIGUARD PROTECT® applications require the use of a buffer zone. A buffer zone is the area adjacent and surrounding the treated area to which entry is restricted for a specified period of time. The applicator and owner/operator of the treated area are responsible for ensuring that unprotected workers and bystanders do not enter the buffer zone during the application and during the buffer zone entry restricted period. All structures within the buffer zone must be vacated during the buffer zone entry restricted period. Land utilized for the buffer zone must be under the control of the applicator and owner/operator of the treated areas. Buffer zones may not extend onto public roads, sidewalks, or other public areas.

Applications must not be made within the following distance of facilities (hospitals, prisons, nursing homes, occupied licensed schools, licensed day care facilities, and licensed assisted living facilities) that cannot be easily evacuated. If the buffer zone is greater than or equal to 300 feet, the distance must be 1/4 mile; if the buffer zone is less than 300 feet, the distance must be 1/8 mile.

#### **WEATHER**

Air Stagnation and Temperature Inversions

Apply MULTIGUARD PROTECT® between sunrise and sunset to avoid unfavorable meteorological conditions. Prior to application, the National Weather Service weather forecast for the day of the application or the 12 hours following application, whichever is later, must be checked to determine if unfavorable weather conditions exist or are predicted (see the Identifying Unfavorable Weather Conditions section) to determine whether the application should proceed. Do not apply if heavy rain is forecast

Do not apply if an air stagnation advisory is in effect.

Do not apply if there are light wind conditions observed (under 2 mph) or if the wind speed is forecast to remain below 5 mph during the application. Do not apply if still or stagnant wind conditions are forecast to persist for more than 18 consecutive hours after the start of the application.

Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained online at <a href="http://www.nws.noaa.gov">http://www.nws.noaa.gov</a>, and radio or by contacting your local National Weather Service Forecasting Office.

#### **Identifying Unfavorable Weather Conditions**

Unfavorable weather conditions block upward movement of air, which results in trapping vapors near the ground. The resulting air mass can move off-site in unpredictable directions. These conditions typically exist prior to sunset and continue past sunrise and persist as late as noontime. Unfavorable conditions are common on nights with limited cloud cover and light to no wind and their presence can be indicated by ground fog and can also be identified by smoke from a ground source that flattens out below a ceiling layer and moves laterally in a concentrated cloud. Measurement of wind speed can be determined by taking measurements every minute for a ten-minute period. The wind speed is the average of the one-minute measurements over this ten-minute period.

#### **COMPATIBILITY**

MULTIGUARD PROTECT® is not compatible with fiberglass, PVC, rubber, and soft elastomers (elastic synthetic rubber components).

#### DO NOT TANK MIX WITH ANY OTHER PRODUCT.

## SECTION I: ATHLETIC FIELDS; GOLF COURSE TEES, GREENS, PRACTICE GREENS, FAIRWAYS AND ROUGHS

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protections 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.

Applications to athletic fields and golf course tees, greens, practice greens, fairways and roughs are non-agricultural uses and are not subject to WPS.

Do not enter or allow others to enter buffer zone for 2 hours after the end of application and until treated area has dried – whichever is longer.

#### MIXING AND APPLICATION DIRECTIONS

MULTIGUARD PROTECT® is for use on established turf on athletic fields; golf course tees, greens, practice greens and spot treatment of fairways and roughs to control root infesting plant parasitic nematodes and suppress fungal plant diseases such as species of *Pythium*, *Phytophthora*, *Fusarium* and *Rhizoctonia*.

Multiguard Protect<sup>®</sup> has been tested on many grass species under a wide range of conditions. Use the lower application rate to avoid phytotoxicity during high stress situations and when applying to bentgrass, bentgrass/Poa or Poa turf grass species. Due to the large number of species and cultivars of turfgrass, it is impossible to test every one for tolerance to Multiguard Protect<sup>®</sup>. The user should determine if Multiguard Protect<sup>®</sup> can be used safely prior to commercial use by testing the prescribed rates on a small area for phytotoxicity prior to widespread use.

Areas to be treated must be irrigated to at least 70% field capacity before application of MULTIGUARD PROTECT<sup>®</sup>.

Apply up to 6 applications of MULTIGUARD PROTECT® per year at a rate of 5.5 to 8.0 gallons of product/acre, at 14-28 day intervals using only ground boom sprayers set to release spray at no more than two (2) feet above the ground. For broadcast applications use a coarse spray "Tee Jet flat spray tip "kind of nozzle (same kind of nozzle used for herbicide applications). Apply the eight (8) gallons/acre rate at the start of the season and under high infestation and/or until acceptable control is achieved. Then apply a rate of 5.5 to 8.0 gallons/acre for additional applications at 14-28 day intervals. Use the lower rate for bentgrass, bentgrass/Poa, or Poa turf grass species or during high stress situations.

Apply at a concentration no greater than 10% MULTIGUARD PROTECT® in water. When pre-mixing before application, begin by adding water to the tank and then add the prescribed amount of MULTIGUARD PROTECT® to the tank. MULTIGUARD PROTECT® forms a stable emulsion at concentrations of 10% or less provided the tank mixture is agitated during the application process. Ensure that the mix tank has adequate mechanical and/or bypass agitation to keep the mixture in suspension.

Within 15 minutes of application, irrigate MULTIGUARD PROTECT® into the soil with ¼ to ½ inches of water using automated in-ground/overhead sprinkler systems or other sprinkler irrigation systems. In sands, loamy sands and sandy loam soils, apply up to ¼ inch of irrigation water to move the MULTIGUARD PROTECT® down into the soil. On finer textured soils and soils with high silt and organic matter components

apply up to ½ inch of water to move the MULTIGUARD PROTECT® down into the soil. Do not apply more water than can be absorbed by the soil in order to avoid puddling and runoff.

#### **RESTRICTIONS:**

- FOLLOWING THIS APPLICATION OF WATER, DO NOT IRRIGATE FOR AT LEAST 24 HOURS TO MAXIMIZE PERFORMANCE.
- •DO NOT USE WITHIN 20 FEET OF A SURFACE WATER BODY (E.G., POND, LAKE, STREAM)

	MULTIGUARD PROTECT® APPLICATION RATES FOR ATHLETIC FIELDS GOLF COURSE TEES, GREENS, PRACTICE GREENS, SPOT TREATMENT OF FAIRWAYS					
		ANI	OROUGHS			
Use	Product Application Rate/Acre	Product Application Rate/1,000 sq ft	Dilution and watering in instructions	Application/Timing		
Athletic fields, golf course tees, greens, practice greens, fairways, and roughs	8 gal /acre for the initial application or for high infestation; 5.5 – 8.0 gal/acre for additional applications. Use the lower rate for bentgrass, bentgrass/Poa or Poa turf grass species or high stress situations.	24 oz/1000 sq ft initial application or for high infestation; 16 – 24 oz /1,000 sq ft for maintenance	into the soil with automated in-	Apply a maximum of 6 applications per year at 14–28 day intervals. Do not exceed 48 gallons product (417 lb ai) per acre per year.		

#### **Athletic Field and Golf Course Restrictions:**

Do not exceed 6 applications per year. Do not exceed a maximum of 48 gal product (417 lb ai) per acre per year.

The entire golf course or athletic field must be closed during treatment of tees, greens, practice greens, roughs, fairways or athletic field. Do not enter or allow others to enter buffer zones around treated areas for 2 hours after the end of the application and until the treated area has dried – whichever is longer.

Notify employees and workers orally and by posting a sign in a central location that includes the location and description of the treated area, the name MULTIGUARD PROTECT® (Active Ingredient: Furfural; EPA Reg. No. 75753-1); the time and date the pesticide is to be applied, and the restricted-entry interval and the buffer zone duration.

Notify non-employees by placing buffer zone signs at all usual points of entry and along likely routes of approach to treated areas. Signs must remain in place from the start of the application to the treated area until a

minimum of 2 hours after the end of application and the treated area has dried. The signs must meet the following criteria:

- Be at least 4 inches by 5 inches in size
- Be constructed of rigid, durable, waterproof material
- Have a background and lettering of contrasting colors
- State: "WARNING/AVISO. DO NOT ENTER/NO ENTRE, Pesticide treated area.

Applications must not be made within 1/8 mile of facilities (hospitals, prisons, nursing homes, occupied licensed schools, licensed day care facilities, and licensed assisted living facilities) that cannot be easily evacuated.

Do not treat more than one acre of contiguous golf course tees and greens. Do not treat more than one acre of a practice green. Do not treat more than one contiguous acre of fairway and roughs. Do not treat more than 10 total acres of a golf course in a 24-hour period.

Do not treat more than three acres of contiguous athletic fields, and do not treat more than 3 total acres of athletic fields in a 24hour period.

#### Athletic fields and golf course tees, greens, roughs and fairway buffer zones:

Buffer zones requirements for MULTIGUARD PROTECT® vary depending upon irrigation system efficiency and reliability. Permanent, automated in-ground pop-up/overhead sprinkler systems are more reliable and have smaller buffer zone requirements than other types of irrigation. Choose the buffer zone from the table below that represents the irrigation system for the area being treated.

Area Treated (contiguous acres) at	Buffer Zone Distance (feet) <sup>a,b</sup>			
Maximum Single Application Rate of 69.5 lb ai/A	Irrigation with automated inground pop-up/overhead sprinkler systems <sup>c</sup>	Irrigation with all other types of sprinkler systems		
	systems			
0.5	15	40		
1.0	15	75		
2.0	30	100		
3.0	60	150		

<sup>&</sup>lt;sup>a</sup> Buffer zones cannot be reduced if lower application rates are used. For treated areas falling in between acreage sizes listed in the table above, use the larger buffer zone. For instance, if 2.5 acre is treated, use the buffer zone listed for 3 acres.

<sup>&</sup>lt;sup>b</sup> Buffer zones for treated areas must not overlap.

<sup>&</sup>lt;sup>c</sup> Automated sprinkler systems must consist of in-ground piping systems only. The automated sprinkler system must be professionally designed, installed and maintained and must provide complete coverage of the treated area. If the irrigation system does not meet all system requirements, then use the larger buffer zones in the column for irrigation with all other types of sprinkler systems.

# SECTION II: TURF/SOD FARMS SPOT TREATMENT, FIELD GROWN PLANTS/ORNAMENTALS, PRE-PLANT BARE SOIL AND COMMERCIAL GREENHOUSES

#### 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 to workers.

#### **ENTRY RESTRICTIONS**

Do not enter or allow workers or others to enter into treated area during the restricted entry interval (REI). The REI for each crop is listed in the application directions associated with the crop.

PPE 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: Long-sleeved shirt and long pants, shoes and socks.

Chemical-resistant gloves (nitrile, butyl, and neoprene rubber, and/or barrier laminate)

Protective eyewear (goggles, face shield or safety glasses).

Notify workers of the application by warning them orally and posting warning signs at entrances to treated areas and at entrances to greenhouses.

#### **HANDLERS**

The following activities are prohibited from being performed in the application block (i.e., the field or portion of a field treated with MULTIGUARD PROTECT<sup>®</sup> in any 24-hour period) by anyone other than persons who have been appropriately trained and equipped as handlers in accordance with the requirements in the Worker Protection Standard (WPS)(40 CFR Part 170) from the start of the application until the entry restricted period ends. Those activities include those persons:

- Participating in the application as supervisors, loaders, drivers, or tractor co-pilots
- Handling or disposing of containers;
- Cleaning, handling, adjusting or repairing application equipment;
- Installing, repairing, operating or removing irrigation equipment;
- Performing any handling tasks as defined by the WPS.

#### PROTECTION FOR HANDLERS

#### SUPERVISION OF HANDLERS

- For handling activities that take place after the application, the applicator must have communicated in a manner that can be easily understood to the site owner/operator and handlers responsible for carrying out those activities the information necessary to comply with the label and procedures in the Site Management Plan (SMP).
- Communication activities must be captured in the SMP.

IMPORTANT: This requirement does not override the requirements in the WPS for Agricultural Pesticides for information exchange between owners/operators of agricultural establishments and commercial pesticide applicators.

#### EXCLUSION OF NON-HANDLERS FROM APPLICATION BLOCK

The applicator supervising the application and the owner/operator of the establishment where the application is taking place must make sure that all persons who are not trained and PPE-equipped and who are not performing one of the handling tasks as stated in this labeling are excluded from the application block during the entry-restricted period.

#### PROVIDING, CLEANING AND MAINTAINING PPE

The employer of any handler (as stated in this label) must make sure that all handlers are provided and correctly wear the required PPE. The PPE must be cleaned and maintained as required by the WPS for Agricultural Pesticides.

#### MANDATORY GOOD AGRICULTURAL PRACTICES (GAPS)

The following GAPs must be followed.

### Turf/Sod Farm Spot Treament, Field Grown Plants/Ornamentals, Pre-Plant Bare Soil and Greenhouse Applications:

#### **Weather Conditions**

Apply MULTIGUARD PROTECT® between sunrise and sunset to avoid unfavorable meteorological conditions. Prior to treatment, the National Weather Service weather forecast for the day of the application must be checked to determine if unfavorable weather conditions are predicted (see the Identifying Unfavorable Weather Conditions section). Do not apply if heavy rain is forecast. Detailed local forecasts for weather conditions, wind speed, and air stagnation advisories may be obtained on-line at <a href="http://www.nws.noaa.gov">http://www.nws.noaa.gov</a>, and radio or by contacting your local National Weather Service Forecasting Office.

#### **Preplant applications:**

- Soil must be in good tilth, free of large clods, and tilled at least the minimum depth of the treatment zone. If subsurface soil compaction layers (hardpans) are present within the intended treatment zone, a deep tillage to fracture these layers must occur prior to, or during, application.
- Plant residue that is present must not interfere with the application or soil seal. Non-decomposed plant material may harbor pests that may not be controlled by the product, especially non-decomposed root material.

#### **Greenhouse applications only:**

- During the application keep doors, vents and windows to the outside open and fans or other mechanical ventilation systems running within the application block.
- Leaks through which gases could enter adjacent enclosed areas must be sealed.

#### GAP for drip application of MULTIGUARD PROTECT®

Use Directions for Drip Irrigation:

- Preplant Bare Soil Treatment: Apply this product only through drip (trickle) irrigation under plastic mulch. Do not apply this product through any other type of irrigation system.
   Greenhouse Treatment: 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 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 recommended, 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 from 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### Drip Irrigation Design:

- 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 being withdrawn from the supply tank when the irrigation system is either 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.

### SITE MANAGEMENT PLAN REQUIREMENTS FOR TURF/SOD FARM SPOT TREAMENT, PRE-PLANT BARE SOIL AND FIELD GROWN PLANTS/ORNAMENTALS

#### **Site Management Plan Requirements**

A Site Management Plan (SMP) must be developed for turf/sod farms, pre-plant bare soil and field grown plants/ornamentals applications and must contain the following elements:

- Applicator information (name, phone number, employer name, employer address)
- General site information
  - Application block location, address or global positioning system (GPS) coordinates
  - Name, address and phone number of owner/operator of the application block
  - Map, aerial photo or detailed sketch showing field location, dimensions, buffer zones, property lines, roads, rights-of-way, sidewalks, permanent walking paths, bus stops, water bodies, walls, nearby structures (occupied and non-occupied), locations of posted signs for buffers, and sites requiring ½ or 1/8 mile buffer zones (schools, state licensed day care centers, nursing homes, assisted living facilities, hospitals, in-patient clinics, and prisons) with distances from the application site labeled.
- General application information (target product application date/window, EPA registration number; information about post-application irrigation with water, including the amount of water used, length of time irrigation equipment was run, amount of water/unit of area)
- Weather conditions (summary of forecasted conditions for the day of the application and the 48-hour period following the application)
  - Wind speed
  - Inversion conditions (e.g., shallow, compressed (low-level) temperature inversion)
  - Air stagnation advisory
  - Precipitation
- Posting procedures, persons who will post signs, location of posting signs, procedures for sign removal
- State and tribal lead agency notification (if state and /or tribal lead agency requires notice, provide a list of contacts that were notified and date notified.)
- Authorized on-site personnel
  - Names and phone numbers of all handlers

- Employer name, addresses, phone numbers for all handlers
- Tasks that each handler is authorized and trained to perform
- Date of PPE training for each handler
- Good Agricultural Practices (GAPs)
  - Description of applicable mandatory GAPs
  - Measurements and documentation to ensure GAPs are achieved (e.g., weather conditions, wind speed, air stagnation advisories.)
- Description of hazard communication. (The buffer zone around the application block has been posted in accordance with the label. Pesticide product labels and material safety data sheets are on—site and readily available for employees to review.)

For situations where an initial SMP is developed and certain elements do not change for multiple sites (e.g., applicator information, authorized on-site personnel, record-keeping procedures, emergency procedures), only the elements that have changed need to be updated in the site-specific SMP provided the following:

- The applicator supervising the application has verified that those elements are current and applicable
  to the application block before it is treated and has documented the verification of the site-specific
  SMP.
- Recordkeeping requirements are followed for the entire SMP (including elements that do not change).

Once the application begins, the applicator must make a copy of the SMP available for viewing by handlers involved in the application. The applicator or the owner/operator of the application block must provide a copy of the SMP to any federal, state, tribal, or local enforcement personnel who request the SMP. In the case of an emergency, the SMP must be available when requested by federal/state/local emergency response and enforcement personnel.

A Post-Application Summary containing the following elements must be prepared by the applicator:

- Actual date of the application, application rate, and size of application block treated.
- Summary of weather conditions on the day of the application and during the 48-hour period following the application.
- Complaint details (if applicable)
  - Person filing complaint (e.g., on-site handler, person off-site)
  - If off-site person, name and address, and phone number of person filing complaint
  - Description of control measures or emergency procedures followed after complaint
- Buffer zones
  - Application rate from lookup table on label (lbs ai/acre)
  - Application block size from lookup table on label (acres)
  - Buffer zone distance
- Description of incidents, equipment failure, or other emergency and emergency procedures followed (if applicable)
- Date of sign removal
- Any deviations from the SMP

The owner/operator of the turf/sod or field grown plants/ornamentals farms must keep a signed copy of the site-specific SMP and the post-application summary record for 2 years from the date of the application.

# MIXING AND APPLICATION DIRECTIONS FOR SPOT TREATMENT OF TURF/SOD FARMS

Multiguard Protect<sup>®</sup> has been tested on many grass species under a wide range of conditions. Use the lower application rate to avoid phytotoxicity during high stress situations and when applying to bentgrass, bentgrass/Poa or Poa turf grass species. Due to the large number of species and cultivars of turfgrass, it is impossible to test every one for tolerance to Multiguard Protect<sup>®</sup>. The user should determine if Multiguard Protect<sup>®</sup> can be used safely prior to commercial use by testing the prescribed rates on a small area for phytotoxicity prior to widespread use.

Field must be irrigated to at least 70% field capacity before application of MULTIGUARD PROTECT®.

Apply up to 6 applications of MULTIGUARD PROTECT® per year at a rate of 5.5 to 8.0 gallons of product/acre per application at 14-28 day intervals using only ground boom sprayers set to release spray at no more than two (2) feet above the ground. For broadcast applications use a coarse spray "Tee Jet flat spray tip "kind of nozzle (same kind of nozzle used for herbicide applications). Apply the eight (8) gallons/acre rate at the start of the season and under high infestation and/or until acceptable control is achieved. Then apply at a rate of 5.5 to 8.0 gallons product/acre for additional applications at 14-28 day intervals. Use the lower rate for bentgrass, bentgrass/Poa or Poa turf grass species or during high stress situations.

Apply at a concentration no greater than 10% MULTIGUARD PROTECT® in water. When pre-mixing before application, begin by adding water to the tank and then add the prescribed amount of MULTIGUARD PROTECT® to the tank. MULTIGUARD PROTECT® forms a stable emulsion at concentrations of 10% or less provided the tank mixture is agitated during the application process. Ensure that the mix tank has adequate mechanical and/or bypass agitation to keep the mixture in suspension.

Within 15 minutes of application, irrigate MULTIGUARD PROTECT® into the soil with ¼ to ½ inches of water using automated in-ground/overhead sprinkler systems or other sprinkler irrigation systems. In sands, loamy sands and sandy loam soils, apply up to ¼ inch of irrigation water to move the MULTIGUARD PROTECT® down into the soil. On finer textured soils and soils with high silt and organic matter components apply up to ½ inch of water to move the MULTIGUARD PROTECT® down into the soil. Do not apply more water than can be absorbed by the soil in order to avoid puddling and runoff.

#### **RESTRICTIONS:**

- FOLLOWING THIS APPLICATION OF WATER, DO NOT IRRIGATE FOR AT LEAST 24 HOURS TO MAXIMIZE PERFORMANCE.
- DO NOT USE WITHIN 20 FEET OF A SURFACE WATER BODY (E.G., POND, LAKE, STREAM)

	MULTIGUARD PROTECT® APPLICATION RATES FOR SPOT TREATMENT OF TURF/SOD FARMS						
Use	Product Applic. Rate/Acre	Product Application Rate/1,000 sq ft	Dilution and watering in instructions	Application/Timing			
Spot Treatment of established turf on turf/sod farms	8 gal/acre for the initial application or for high infestation; 5.5 – 8.0 gal/acre for additional applications. Use the lower rate for bentgrass, bentgrass/Poa or Poa turf grass species or during high stress situations.	24 fl oz/ 1000 sq ft initial application or for high infestation; 16 - 24 fl oz/ 1,000 sq ft for maintenance	Dilute product 1:9 with water. Within 15 minutes of application, irrigate product into the soil with overhead sprinklers. In sands, loamy sands and sandy loam soils apply up to 1/4 acre-inch water. In finer texture soils and soils with high silt and organic materials, apply up to 1/2 acre-inch of water to move the Multiguard Protect® into the soil.  FOLLOWING THIS WATERING-IN, DO NOT IRRIGATE FOR AT LEAST 24 HOURS TO MAXIMIZE PERFORMANCE.	Apply a maximum of 6 applications per year at 14–28 day intervals			

#### **Turf/Sod Farm Restrictions:**

Apply a maximum of 6 applications per year.

For spot treatment of up to 3 contiguous acres. Do not treat more than 3 acres in a 24 hour period.

The restricted entry interval (REI) is 12 hours.

Entry into the buffer zone is prohibited for 8 hours following the end of application.

Buffer zone signs must be placed at all usual points of entry and along likely routes of approach from areas where people who are not under the land owner/operator's control may approach the buffer zone. Signs must meet the general standards outlined in the Worker Protection Standard (WPS) for text size and legibility (see 40 CFR §170.120) and include the following information:

-- "Keep Out" symbol (as shown below)



- -- "WARNING/AVISO. DO NOT ENTER/NO ENTRE, Pesticide treated area.
- -- contact information for the applicator in charge of the application

Turf /sod farm buffer zones:

Area Treated (acres) at	Buffer Zone Distance (feet) <sup>a,b</sup>		
Maximum Application Rate of			
69.5 lbs ai/A			
0.5	15		
1	15		
2	30		
3	60		

<sup>&</sup>lt;sup>a</sup> <u>Buffer zones cannot be reduced if lower application rates are used.</u> For treated areas falling in between <u>acreage sizes listed in the table above, use the larger buffer zone.</u> For instance, if 2.5 acres are treated, use the buffer zone listed for 3 acres.

#### APPLICATION DIRECTIONS FOR PRE-PLANT BARE SOIL TREATMENT

Pre-plant bare soil treatments may be used on the following commodities that are considered non-food uses when MULTIGUARD PROTECT® is applied to bare soil prior to planting: fruiting vegetables (Crop Group (CG 8), cucurbits (CG 9), citrus (CG 10), pome fruits (CG 11), stone fruits (CG 12), berries (CG 13) and tree nuts (CG 14). MULTIGUARD PROTECT® may be applied pre-plant at the following specified rates depending upon the pest(s) to be controlled:

For the control of root infesting plant parasitic nematodes and for suppression of fungal plant diseases such as *Pythium*, *Phytophthora*, *Fusarium* and *Rhizoctonia*.

For maximum effectiveness, soils moisture levels must be at 70% field capacity before applying MULTIGUARD PROTECT<sup>®</sup>.

Apply MULTIGUARD PROTECT® only as a banded treatment to rows or pre-formed beds prior to planting by the following methods: shank-injection or drip tapes. The treated rows must be tarped with plastic mulch immediately following treatment, or during treatment. The tarp must remain on the row for the growing season.

#### Mixing/Loading

Closed systems must be used when mixing/loading pre-plant applications for both shank injection and chemigation methods of application. The closed system must remove the pesticide from its original container and transfer the pesticide product through connecting hoses, pipes and couplings that are sufficiently tight to prevent exposure of handlers to the pesticide product. Use RPV or RSV dispense/fill couplers and container valves or the equivalent during transfer.

For shank injection, the undiluted Multiguard Protect® must be pumped directly via the closed system from the product container to the tank on the spray rig. For chemigation, Multiguard Protect® must be dosed directly via the closed system into an irrigation system via a dosing pump, or transferred directly into field mixing tanks that can be moved around the field or located in a pump house that supports the chemigation system.

<sup>&</sup>lt;sup>b</sup> Buffer zones for treated areas must not overlap.

The closed system must include written operating instructions. The pesticide applicator must ensure that the operating instructions are available at the mixing/loading site. Protective eyewear must be worn when using closed systems operating under pressure. (See 40 CFR 170.607 (d)(3) for detailed safety requirements.)

#### **Shank/Injection**

Apply one application of MULTIGUARD PROTECT® by soil injection/rotovation to plant beds or rows at 24 fl oz of product/1000 ft² a minimum of 7 days before planting/transplanting.

Apply concentrated product with no dilution by injecting in front of a rotovator (6-8 inches deep). Irrigate immediately after application as specified in the irrigation instructions.

The rows must be tarped with plastic mulch immediately following treatment, or during treatment. The interval between treatment and planting must be a minimum of 7 days.

#### **Dripper**

Apply one application of MULTIGUARD PROTECT® at 24 fl oz of product/1000 ft<sup>2</sup> a minimum of 7 days before planting/transplanting; apply through drip tapes in irrigation systems installed under tarp (polyethylene plastic mulch) before seeding or transplanting, with tarp edges buried along the furrow and at the end of rows.

Drip tapes must be clean and free of any fertilizer or other pesticide residue. Flush tapes with water for 10 minutes prior to and after application with MULTIGUARD PROTECT®. The system should provide uniform water flow and should not have leaks. For instructions on setting the emitter spacing and line pressure to give the best bed coverage and reduce the loss of chemigated product through leaching, contact your local extension service or drip tape manufacturer.

For drip tape applications, pre-mix the MULTIGUARD PROTECT® in water in a blending tank by adding water first to the tank, followed by the addition of the prescribed amount of MULTIGUARD PROTECT®. Dilute MULTIGUARD PROTECT® 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. Apply through drip tapes installed under plastic mulch immediately following treatment or during treatment on pre-formed bed tops. Use sufficient water to allow thorough incorporation throughout the bed to achieve efficacy, but not cause runoff or excessive leaching. See "Irrigation instructions for all methods of soil pre-plant treatment" below. The interval between treatment and planting must be a minimum of 7 days.

Follow Good Agricultural Practices (GAP) for drip application of MULTIGUARD PROTECT® provided above under MANDATORY GOOD AGRICULTURAL PRACTICES on p. 9

#### Irrigation instructions for all methods of soil pre-plant treatment

In sands, loamy sands and sandy loam soils, apply ¼ -½ inch of irrigation water immediately after product application to move the MULTIGUARD PROTECT® down into the soil to a depth of six (6) inches. On finer textured soils and soils with high silt and organic matter components, use the maximum amount of irrigation water (½ inch) to move the MULTIGUARD PROTECT® down to a six (6) inch depth.

FOLLOWING THIS WATERING-IN, DO NOT IRRIGATE FOR AT LEAST 24 HOURS TO MAXIMIZE PERFORMANCE.

MULTIG	MULTIGUARD PROTECT® APPLICATION RATES FOR PRE-PLANT BARE SOIL USES					
	Multiguard	Multiguard	Application and watering in	Application/ Timing		
Crop	Protect <sup>®</sup>	Protect <sup>®</sup>	instructions			
Groups	Application	Application				
	Rate/Acre	Rate/1,000 sq ft				
<ul><li>Fruiting</li></ul>	8 gal/ acre	24 fl oz/1000 sq ft	Shank injection/rotovation:	One pre-plant		
vegetables	to bare soil		Apply undiluted Multiguard	application a		
(Group 8)	before		Protect <sup>®</sup> to plant beds or rows	minimum of 7 days		
<ul><li>Cucurbits</li></ul>	planting.		by soil injection/rotovation to a	before planting/		
(Group 9)	(see in-		depth of 6-8 inches. Irrigate	transplanting crop.		
•Citrus	structions		immediately after treatment	Restrictions:		
(Group 10)	below for		with ½ to ½ inch of water.**	Do not exceed 1		
■Pome fruits	converting		The rows must be tarped with	application per year.		
(Group 11)	broadcast		plastic mulch immediately	Do not exceed a		
•Stone fruits	rate to		following treatment, or during	maximum of 8 gal		
(Group 12)	banded		treatment.	product (69.4 lb ai)		
<ul><li>Berries and</li></ul>	applic. rate)			per acre per year, for		
strawberries	8 gal/acre	24 fl oz/1000 sq ft	Dripper:	shank and dripper		
(Group 13)	(see in-		Dilute Multiguard Protect® 1:9	applications.		
■Tree nuts	structions		with water and apply product	(Equivalent to 4.8		
(Group 14)	below for		under tarp on beds through	gal product (41.7 lb		
	converting		irrigation drip tapes. Apply the	ai) per acre as		
	broadcast		product with irrigation of ¼ to	applied in banded		
	rate to		½ inch of water.** Flush the	applications as		
	banded		irrigation system with water to	instructed on the		
	applic. rate)		remove any residual product	label.)		
			after the product application.	Land and seedbeds		
			The beds must be tarped with	must be well		
			plastic mulch immediately	prepared to support		
			following treatment, or during	even distribution of		
			treatment.	the product		
				FOLLOWING THIS		
				WATERING-IN, DO NOT IRRIGATE FOR		
				AT LEAST 24 HOURS		
				TO MAXIMIZE		
				PERFORMANCE.		

<sup>\*\*</sup>In sands, loamy sands and sandy loam soils apply ¼ -½ acre-inch water. In finer texture soils and soils with high silt and organic materials, use the highest irrigation amount of ½ acre-inch of water to move the Multiguard Protect® to a depth of 6 inches into the soil.

## CALCULATING THE BROADCAST EQUIVALENT RATE OF PRODUCT PER ACRE OF FIELD FOR BANDED (BEDDED/STRIP) APPLICATIONS

The rates specified in the table above are represented as follows:

- The amount of product in gallons per acre refers to the total crop area to be treated and is generally known as a broadcast application. Pre-plant applications of Multiguard Protect® may only be made as a banded treatment to rows or pre-formed beds. Instructions for converting the per acre broadcast rate to the per acre banded rate follow.
- For banded applications to rows or beds the correct amount of product used per acre will be less because the area to be treated is actually the area covered by the band, not the total cropland planted.
- The following formula must be used to calculate the amount of product needed per acre of crop when banded applications are made:

#### Amount of product per acre of field (gallons/acre) =

(\*band width in inches/\*\*row spacing in inches) x broadcast rate (gallons/acre)

- \*Band width measurement must be taken from the bottom of a raised bed.
- \*\*The row spacing must be calculated center-to-center as illustrated in the figures below.

Figure 1: Un-raised Bed

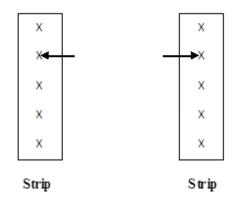
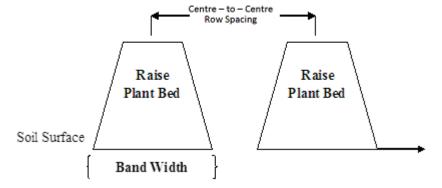


Figure 2: Raised Bed



#### **Pre-plant Bare Soil Restrictions:**

Do not treat more than 40 acres in a 24 hour period.

The restricted entry interval (REI) is 12 hours

Entry into the buffer zone is prohibited for 8 hours following the end of application.

Buffer zone signs must be placed at all usual points of entry and along likely routes of approach from areas where people who are not under the land owner/operator's control may approach the buffer zone. Signs must meet the general standards outlined in the Worker Protection Standard (WPS) for text size and legibility (see 40 CFR §170.120) and include the following information:

-- "Keep Out" symbol (as shown below)



- -- "WARNING/AVISO. DO NOT ENTER/NO ENTRE, Pesticide treated area.
- -- contact information for the applicator in charge of the application

Pre-plant bare soil treatment buffer zones:

Area Treated (acres) at	Shank injection/	Drip Tape Buffer Zone
Maximum Application Rate*	rotovation Buffer Zone	Distance (feet)
	Distance (feet)**	
1	15	15
2	15	15
3	15	15
4	15	15
5	15	15
10	15	15
15	15	15
20	15	15
25	15	15
30	15	15
35	15	15
40	15	15

<sup>\*</sup> Maximum application rates for MULTIGUARD PROTECT® are 8 gal/A for shank injection/rotovation and for drip tapes (equivalent to approximately 4.8 gal/acre as applied in banded applications).

# MIXING AND APPLICATION DIRECTIONS FOR USE ON FIELD GROWN PLANTS/ORNAMENTALS

MULTIGUARD PROTECT® can be used outdoors for immature (non-bearing) fruit trees and vines, cut flower production, and production nurseries. Do not apply to trees or vines that will bear harvestable fruit within 12 months of the last application.

<sup>\*\*</sup> Buffer zones cannot be reduced if lower application rates are used.

### RESTRICTION: DO NOT USE WITHIN 20 FEET OF A SURFACE WATER BODY (E.G., POND, LAKE, STREAM).

#### POST-PLANT APPLICATIONS

Apply through tubes/drip tapes/micro jets/micro sprayers/micro sprinklers at 2.25 to 5.5 gallons per treated acre (0.052 to 0.126 gal/1000 sq ft). Prior to application, dilute MULTIGUARD PROTECT® 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 minimum dilution rate is 16 gallons of the product in 144 gallons of water. Apply 4-8 applications per crop at 14-28-day intervals. Post-plant applications control plant parasitic nematodes and suppress certain fungal diseases.

#### DRENCH APPLICATIONS

MULTIGUARD PROTECT® may be used for potted plants as a pre-plant or post-plant drench for the control of stem and root diseases. Begin applications before the plants become infected. Apply with a mechanically pressurized hand gun sprayer as a full pot drench at 2.5 to 5.0 oz. in 100 gals, up to eight applications on a 7-28 day schedule per year. Apply the solution until it begins to drip through the bottom of the pots.

### NOTICE TO USER REGARDING TUBE/DRIP TAPE/ MICRO JET/MICRO SPRAYER/ MICRO SPRINKLER AND DRENCH TREATMENTS:

Multiguard Protect<sup>®</sup> has been tested for phytotoxicity on many ornamental species under a wide range of conditions, however, due to the large number of species and cultivars of ornamentals and nursery plants, it is impossible to test every one for tolerance to Multiguard Protect<sup>®</sup>. Neither the manufacturer nor the Seller has determined if MULTIGUARD PROTECT<sup>®</sup> can be used safely on ornamental plants not listed on this label. The user should determine if Multiguard Protect<sup>®</sup> can be used safely prior to commercial use by testing the prescribed rates on a small number of plants for phytotoxicity prior to widespread use.

Ornamentals that have been shown to be tolerant of MULTIGUARD PROTECT® post-plant drench applications at 5 oz./100 gal are:

(	Chrysanthemum	Poinsettia	Fusia	Pittosporum	Roses

This product may cause injury to the following ornamentals.

Celosia Coleus New Guinea Impatiens Lisanthus Petunia

Do not use on Leather leaf fern

MULTIGUARD PROTECT® APPLICATION RATES FOR NON-FOOD OUTDOOR TERRESTRIAL USE – FIELD GROWN PLANTS AND ORNAMENTALS							
Use	Product	Product Applic.	Dilution and watering	Application/Timing/			
	Applic.	Rate/ 1,000 sq ft	in instructions	Equipment			
	Rate/Acre						
Post-plant –	2.25 - 5.5	7 - 16  fl oz/1000	Dilute	Apply a maximum of 8			
Field Grown	gal /acre	sq ft	MULTIGUARD	applications per year at			
Plants and			PROTECT® 1:9 with	14-28 day intervals at			
Ornamentals –			water; water in after	least 14 days after			
tubes/tapes/			application with	transplant.			
micro jets/micro			½ to ½ inch water.	_			
sprayers/micro							
<u>sprinkler</u>							
(includes shade							
houses)							
Drench –	See dilution		Use $2.5 - 5.0$ fl oz	Begin treatment before			
Pre/post planting	instructions		MULTIGUARD	plants become infected.			
<ul><li>Potted Plants</li></ul>			PROTECT®/100 gal	Repeat every 7-28 days.			
(includes shade			water. Completely	Apply up to 8			
houses) –use a			wet the growing	applications/year.			
mechanically			media. Allow to drip				
pressurized			through bottom of				
handgun sprayer			pots.				

#### **Outdoor Ornamental Restrictions:**

Apply a maximum of 8 applications per year.

Do not treat more than 3 acres in a 24 hour period.

The restricted entry interval (REI) is 12 hours.

Entry into the buffer zone is prohibited for 8 hours following the end of application.

Buffer zone signs must be placed at all usual points of entry and along likely routes of approach from areas where people who are not under the land owner/operator's control may approach the buffer zone. Signs must meet the general standards outlined in the Worker Protection Standard (WPS) for text size and legibility (see 40 CFR §170.120) and include the following information:

-- "Keep Out" symbol (as shown below)



- -- "WARNING/AVISO. DO NOT ENTER/NO ENTRE, Pesticide treated area.
- -- contact information for the applicator in charge of the application

Field Grown Plants/Outdoor Ornamentals Buffer Zones:

Area Treated (acres) at	Buffer Zone Distance (feet) <sup>a,b</sup>	
Maximum Application Rate of		
69.5 lbs ai/A		
0.5	15	
1	15	
2	30	
3	45	

<sup>&</sup>lt;sup>a</sup> Buffer zones cannot be reduced if lower application rates are used.

# MIXING AND APPLICATION DIRECTIONS FOR GREENHOUSE ORNAMENTAL USE

Dripper lines must be clean and free of any fertilizer or other pesticide residue. Flush dripper lines with water for 10 minutes prior to and after application with MULTIGUARD PROTECT<sup>®</sup>. MULTIGUARD PROTECT<sup>®</sup> is not compatible with fiberglass, PVC, rubber, and soft elastomers (elastic synthetic rubber components).

For Drip Irrigation applications, transfer the product to the blending tank, pre-mix the MULTIGUARD 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 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® PROTECT® in water. When pre-mixing before application, begin by adding water to the mixing tank and add the prescribed amount of MULTIGUARD PROTECT®. MULTIGUARD 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 PROTECT® use.

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

Water in the MULTIGUARD PROTECT® through tubes or drip tapes at 3.0 to 5.5 gallons of product per treated acre (9 to 16 fl oz of product/1000 sq ft, or 22.3 to 48 lb ai/a). This application method moves the MULTIGUARD PROTECT® into the plant root zone. Use sufficient drip lines to give complete coverage of the planting bed. Prior to application, dilute MULTIGUARD PROTECT® 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. Apply 4-8 applications per growing season on a at 14-28 day retreatment schedule. Post-plant applications control plant parasitic nematodes and suppress certain fungal diseases.

#### **DRENCH APPLICATIONS**

MULTIGUARD PROTECT® may be used as a pre-plant or post-plant drench in water 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 2.5 to 5.0 fl oz. of product in 100 gallons of water, on a 7-28 day schedule throughout the growing

<sup>&</sup>lt;sup>b</sup> Buffer zones for treated areas must not overlap.

season. Use 5.0 fl oz product/100 gallons of water when high infestation levels are expected. Normally the 14 to 28 day application schedule is acceptable, however follow the 7 day application schedule if high levels of infestations are expected or if 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 apply at least 1 pint of drench solution to each square foot of plants grown in 4 inch deep pots. This volume of drench is equivalent to 125 gallons of water/1000 ft<sup>2</sup>. For deeper pots increase the amount of drenching solution 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 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 one irrigation cycle per day. This dilution gives a final concentration of 50 ppm of MULTIGUARD PROTECT® in the irrigation water and if 125 gallons of water is applied/1000ft² of surface area the use rate of MULTIGUARD PROTECT® is 0.75 fl oz product/1000 ft² for each irrigation. If another injection ratio is used, adjust the concentration of MULTIGUARD PROTECT® in the stock solution appropriately. This use controls the nematodes and suppresses fungal diseases listed on this label. Do not inject MULTIGUARD PROTECT® into the drip irrigation system for the first and last hour of the irrigation session.

#### OVER THE TOP APPLICATIONS WITH SPRAY BOOM OR OVERHEAD IRRIGATION SYSTEM.

MULTIGUARD PROTECT® may be applied over the top of the plant canopy with either a spray boom or irrigation system. Begin applications prior to plants becoming infested. Apply MULTIGUARD PROTECT® at 8 to 16 fl oz of product/ 1000 ft² of plant/potting media surface in a minimum of 20 gallons solution per 1000 ft² on a 7-28 day schedule throughout the growing season. Use the 16 fl oz of product/1000ft² rate when high infestation levels are expected. Normally the 14 to 28 day application schedule is acceptable, however use the 7 day application schedule if high levels of infestations are expected or if there has been a history of high levels of infestation. Immediately after the application, apply additional irrigation water that does not contain MULTIGUARD PROTECT® over the plant canopy to water in the MULTIGUARD PROTECT®, giving a total of at least 125 gallons of water/1000 ft² of plant canopy/potting media surface. For the MULTIGUARD 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 PROTECT® may be applied over the top of the plant canopy with a low pressure back pack type sprayer. Begin applications prior to plants becoming infested. Apply MULTIGUARD PROTECT® at 8 to 16 fl oz of product/1000 ft² of plant/potting media surface in a minimum of 20 gallons solution per 1000 ft² on a 7-28 day schedule throughout the growing season. Use the 16 fl oz of product/1000ft² rate when high infestation levels are expected. Normally the 14 to 28 day application schedule is acceptable, however use the 7 day application schedule if high levels of infestations are expected or if there has been a history of high levels of infestation. Immediately after the MULTIGUARD PROTECT® application apply additional irrigation water that does not contain MULTIGUARD PROTECT® over the plant canopy to water in the MULTIGUARD PROTECT®, giving a total of at least 125 gallons of water/1000 ft² of plant canopy/potting media surface. For the MULTIGUARD 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 PROTECT®.

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

Multiguard Protect<sup>®</sup> has been tested for phytotoxicity on many ornamental species under a wide range of conditions, however, due to the large number of species and cultivars of ornamentals and nursery plants, it is impossible to test every one for tolerance to Multiguard Protect<sup>®</sup>. Neither the manufacturer nor the Seller has determined if MULTIGUARD PROTECT<sup>®</sup> can be used safely on ornamental plants not listed on this label. The user should determine if Multiguard Protect<sup>®</sup> can be used safely prior to commercial use by testing the prescribed rates on a small number of plants for phytotoxicity prior to widespread use.

Ornamentals that have been shown to be tolerant of MULTIGUARD PROTECT® post-plant drench applications at 5 fl oz of product/100 gal are:

Chrysanthemums Poinsettia	Fusia	Pittosporum	Roses
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This product may cause injury to the following ornamentals.

Celosia Coleus New Guinea Impatiens Lisanthus Petunia

Do not use on Leather leaf fern

MULTIGUARD PROTECT® APPLICATION RATES FOR NONFOOD INDOOR GREENHOUSE USE – PLANTS AND ORNAMENTALS						
Use	Product Application Rate/acre	Product Application Rate/ 1,000 sq ft	See dilution and watering in instructions	Application/Timing		
Post-planting in propagation beds – tubes/tapes	3.0 -5.5 gal/acre	9 – 16 fl oz/1000 ft <sup>2</sup>	1:9	4-8 applications on a 14-28 day retreatment schedule		
Drench for pots (Post-planting)	See dilution instructions		Use 2.5 -5.0 fl oz product/ 100 gal. Completely wet the growing media. Allow to drip through bottom of pots.	Begin treatment before plants become infected. Repeat every 7-28 days.		
Pre/post planting: Irrigation Water/ Fertilizer Solution Application		0.75 fl oz/1000 ft <sup>2</sup> for each irrigation. (125 gal of water with 50 ppm product/ 1000 ft <sup>2</sup> )	Mix stock solution of 1 gal product in 99 gal water or liquid fertilizer solution. Inject stock solution into irrigation water at 1:200 ratio.	Apply during one irrigation cycle per day.		
Post-planting: • Spray boom or overhead irrigation systems • Spot treatment-low pressure backpack sprayer		8.0 – 16.0 fl oz/ 1000 ft <sup>2</sup>	Minimum 20 gal solution per 1000 ft <sup>2</sup> . Immediately water-in over plant canopy with minimum of 125 gal water/1000 ft <sup>2</sup>	Every 7-28 days throughout the growing season. Use the higher application rate and shorter retreatment interval when high infestations are expected.		

#### **Greenhouse Restrictions:**

Comply with the maximum application rate and number of applications specified for each use.

This product cannot be used in interiorscapes (e.g., malls, offices), hotels, theme parks, conservatories or arboretums where agricultural plants are present for aesthetic or climatic modifications.

The Restricted Entry Interval (REI) is 9 days for cut flowers and 12 hours for all other greenhouse uses.

Do not use MULTIGUARD PROTECT® on sterile soil.

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

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 PROTECT®.

Signs shall be posted no sooner than 24 hours before the scheduled application of the pesticide, remain posted throughout the application and any REI, be removed within 3 days after the end of the application and REI and before agricultural-worker entry is permitted, signs shall remain visible and legible during the time they are posted, and when several contiguous areas are to be treated with pesticides on a rotating or sequential basis, the entire area must be posted.

Greenhouse 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 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.
- 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 under the WPS may enter the buffer zone. See "Handlers" section for requirements regarding handler training.

Buffer zone signs must be placed at all usual points of entry and along likely routes of approach from areas where people who are not under the land owner/operator's control may approach the buffer zone.

Signs must meet the general standards outlined in the Worker Protection Standard (WPS) for text size and legibility (see 40 CFR §170.120) and include the following information:

-- "Keep Out" symbol (as shown below)



- -- "WARNING/AVISO. DO NOT ENTER/NO ENTRE, Pesticide treated area.
- -- contact information for the applicator in charge of the application

#### APPLICATION THROUGH IRRIGATION EQUIPMENT

Follow Good Agricultural Practices (GAP) for drip application of MULTIGUARD PROTECT® provided above under MANDATORY GOOD AGRICULTURAL PRACTICES on p. 10

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** The color of furfural turns to red-brown during storage. The substance affects many synthetic materials; store only in original packing. Do not store in plastic containers. Separate from oxidants, strong acids and strong bases. Store in cool, dark, secure and ventilated area away from ignition sources.

**Pesticide Disposal**: 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 Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse container (or equivalent) promptly after emptying. Containers  $\leq 5$  gallons triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  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. Containers  $\geq 5$  gallons triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### CONDITIONS OF SALE AND WARRANTY

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risk inherently associated with use of this product. Plant injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Agriguard Company, LLC or the Seller. All such risks shall be assumed by the Buyer.

Seller warrants that the product conforms to its chemical description and when used according to label directions, it is reasonably fit for the purpose stated on the label. To the extent consistent with applicable law, 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.