

TOPGUARD®

FUNGICIDE SPECIALTY CROPS

For use on grapes (fresh, table, wine, raisin); hops, pome fruit (apple, crabapple, loquat, Mayhaw, pear, oriental pear, quince); and stone fruit.

EPA Reg. No. 279-3557

EPA Est. No. 70815-GA-001

ACTIVE INGREDIENT:	By Wt.
*Flutriafol	11.80%
OTHER INGREDIENTS:	88.20%
TOTAL:	100.00%

*Contains 1.04 pounds per gallon of the active ingredient flutriafol. Suspension concentrate.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See First Aid, Precautionary Statements, and Directions for Use on individual packages.

See additional precautionary statements and Directions for Use in booklet.

See first statements on back panel.

Sold By



FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104

Net Contents: 48 fl. oz.

02-10-17

FIRST AID

If on skin	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.
If in eyes	<ul style="list-style-type: none"> 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.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.

Note to Physician: No specific antidote. Treat symptomatically.

For SPILLS Contact CHEMTREC 1-800-424-9300

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and all other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves, and shoes plus socks. Follow 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.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This formulated product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Ground Water Advisory: Flutriafol has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This product may 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 product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). The REI for each crop is located in the use directions for each crop.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is: coveralls, chemical resistant gloves, and shoes plus socks.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store unused product in original container in a cool, dry, secure area.

Pesticide Disposal: Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray 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. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure 2 more times.

PRODUCT DIRECTIONS

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Chemigation:

Application through Irrigation Systems (Chemigation):

Apply TOPGUARD Fungicide Specialty Crops through irrigation to crops at rates and timings specified in this label. Chemical tank and injector system must be thoroughly cleaned before and after use. Flush system with clean water.

Drip Irrigation: Use TOPGUARD Fungicide Specialty Crops for control of soilborne diseases at rates and timing as specified in this label. Ensure adequate soil moisture prior to utilizing TOPGUARD Fungicide Specialty Crops in a drip irrigation system. Do not apply TOPGUARD Fungicide Specialty Crops through drip irrigation that is deeper than 12" below the soil surface.

Discontinue drip irrigation application at fungicide depletion from the main feed supply tank or after 6 hours from start, whichever is shorter. Delay subsequent irrigation (water only) for at least 24 hours following drip application for best results.

Sprinkler Irrigation: Apply this product through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, micro sprinkler or hand move irrigation systems. Do not apply this product through any other type of irrigation system except as specified on this label.

With Center Pivot irrigation equipment, use TOPGUARD Fungicide Specialty Crops only with equipment with drive systems that provide uniform water distribution. Do not use end guns for chemigation due to the non-uniform application pattern.

Add TOPGUARD Fungicide Specialty Crops to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. Maintain agitation during the entire application period.

For continuous-move irrigation systems, apply the labeled rate for that crop in ½ acre-inch or less per acre. For stationary or non-continuous moving systems, inject TOPGUARD Fungicide Specialty Crops spray mixture during the last 20-30 minutes of the set.

Do not apply when winds are greater than 10-15 mph to avoid drift or wind skips. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control.

If you have questions about calibration you should contact a State Extension Service specialist, equipment manufacturer or other expert.

Operating Requirements for Application through Irrigation Systems:

1. Do not use chemigation when conditions are favorable for drift to non-target areas.
2. To prevent water-source contamination from backflow, a functional check valve, vacuum relief valve, and low-pressure drain should be located on the irrigation pipeline.
3. To prevent backflow back toward the injection pump, the pesticide injection pipeline must be equipped with a functional, automatic, quick-closing check valve.
4. To prevent fluid from being withdrawn from the supply tank when the irrigation system is shut down, the pesticide injection pipeline should also be equipped with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock.
5. The system must also contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops and a functional pressure switch to stop the pump motor when water pressure decreases to a point at which pesticide distribution is adversely affected.
6. A metering pump, constructed of materials compatible with pesticides and capable of being fitted with a system interlock, such as a positive displacement injection pump (e.g., a diaphragm pump), must be included in the system.
7. A knowledgeable person responsible for the chemigation system should shut the system down and turn the irrigation water off, ensuring enough time for the pesticide to be flushed through all lines and nozzles.
8. No irrigation system, including those in greenhouses, used to distribute pesticides can be connected to a public water source unless safety measures and devices prescribed in the pesticide label for such connection are in place.

Specific Instructions for Public Water Systems:

1. Public water system means a system that provides piped water for human consumption if the 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. All measures and devices listed in the above section, "Operating Requirements for Application through Irrigation Systems", must be operational for connection to a public water system.
3. Additionally, 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 must be a complete physical break (air gap) between the 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.

Rainfastness: TOPGUARD Fungicide Specialty Crops is rainfast 2 hours after application. Disease control will be reduced if rainfall occurs within 2 hours of application.

Crop Rotation: Fields treated with an application rate of greater than 0.228 lbs.ai/acre/season may be planted to the following crops that have tolerances established for residues of flutriafol: field corn; field corn grown for seed; popcorn; cotton; cucurbits; fruiting vegetables; grapes; hops; Brassica leafy vegetables crop group 5; leafy vegetables, except Brassica, crop group 4; peanut; pome fruit; grain sorghum; soybean; stone fruit; strawberry; sugar beet; tomato; tree nuts; triticale; or wheat immediately after the last application. Fields treated with application rates less than or equal to 0.228 lbs.ai/acre/season may be planted to the crops listed above, and may also be planted to sweet corn 180 days after the last application. Rotation to any other crop is prohibited.

RATE EQUIVALENCY TABLE

Product Rate (fl. oz./A)	Equivalent Active Ingredient Rate (lb a.i./A)
7.0	0.057
8.0	0.065
9.0	0.073
10.0	0.081
11.0	0.089
12.0	0.098
13.0	0.106
14.0	0.114

Compatibility Jar Test: TOPGUARD Fungicide Specialty Crops is compatible with most products, however not all combinations have been tested. Use the following compatibility jar test to ensure physical compatibility.

Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add wettable powders and water dispersible granular products first, next liquid flowables, then emulsifiable concentrates, and last liquid soluble products. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the spray tank. Use tank mix combinations on a small number of plants before treating larger areas. When tank mixing, follow more restrictive labeling of any tank mix partner. Do not tank mix with any product that contains a prohibition on tank mixing.

Use of Adjuvants: An adjuvant may be used with TOPGUARD Fungicide Specialty Crops unless otherwise specified in the crop use directions. TOPGUARD Fungicide Specialty Crops is compatible with most products, however not all have been tested. Use the compatibility jar test to ensure physical compatibility.

Tank Mixing: TOPGUARD Fungicide Specialty Crops may be tank mixed with other fungicides, herbicides, insecticides, and/or other additives unless prohibited on the label of the tank mix partner. Follow more restrictive labeling of any tank mix partner. Although TOPGUARD Fungicide Specialty Crops is compatible with most products, not all combinations have been tested. Use the compatibility jar test to ensure physical compatibility. Before applying any tank mixture not specifically recommended on this label, the crop safety of the target crop should be confirmed by applying the mixture to a small area of the target crop in accordance to the label instructions.

Spray Equipment/Volume: TOPGUARD Fungicide Specialty Crops should be applied in sufficient water volume to ensure thorough coverage as a broadcast foliar application for good disease control.

For ground application, use a minimum of 10 gallons of spray solution per acre by ground sprayer. For aerial application, use aircraft spray equipment in a minimum of 5 gallons of spray solution per acre.

Resistance Management: TOPGUARD Fungicide Specialty Crops contains the active ingredient flutriafol, which is a Group 3 fungicide based on the mode of action classification system. Repeated use of the same group of fungicides for a targeted disease may lead to the selection of resistant strains of fungi and result in reduced disease control.

To maintain performance of TOPGUARD Fungicide Specialty Crops and other fungicides in the same group, tank mix or rotate with a different fungicide group for good disease resistance management. For assistance on a particular crop and disease control situation, consult your local agricultural dealer, consultant, applicator, or state extension personnel for specific practices or recommendations in your area.

High Disease Pressure: Where a range is given, use the higher rate of TOPGUARD Fungicide Specialty Crops and/or reduced spray interval when disease pressure is high and/or conditions are favorable for disease development.

CROP USE DIRECTIONS

Use Directions for Grapes (fresh, table, wine, raisin)

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (<i>Uncinula necator</i>)	8 to 10	Apply TOPGUARD Fungicide Specialty Crops as a foliar spray beginning at 6 to 10 inch shoots.	14 to 21
Black Rot (<i>Guignardia bidwellii</i>)	8 to 10	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	14 to 21
Restrictions: <ul style="list-style-type: none"> No single application may exceed 10 fl. oz. of product/A. Do not apply more than 6 applications of product per year. Do not apply more than 60 fl. oz. of product/A per year. Do not apply more than 0.488 lb. ai of flutriafol/A per year. Restricted Entry Interval (REI): The REI for girdling or turning of grapes is 5 days. The REI for all other activities is 12 hours. Preharvest Interval: Do not apply within 14 days of harvest. 			

Use Directions for Hops

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (<i>Podosphaera macularis</i> , <i>Sphaerotheca macularis</i>)	10 - 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development. Apply a minimum of 30 gallons per acre spray volume for ground applications and 10 gallons per acre for aerial applications.	14
Restrictions: <ul style="list-style-type: none"> Do not apply more than 4 applications per year Do not apply more than 56 fl. oz./A per year Do not apply more than 0.455 lb. ai of flutriafol/A per year. An adjuvant may be used with TOPGUARD Fungicide Specialty Crops Restricted Entry Interval (REI) is 12 hours Preharvest Interval: Do not apply within 7 days of harvest 			

Use Directions for Pome Fruit (Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, and Quince)

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (<i>Podosphaera leucotricha</i>) Quince Rust (<i>Gymnosporangium clavipes</i>) Cedar Apple Rust (<i>Gymnosporangium juniperi-virginianae</i>)	8 to 12	Initiate applications at green tip and continue through cover sprays.	10
Apple Scab (<i>Venturia inaequalis</i>)	13	Initiate applications at green tip or when environmental conditions are favorable for primary scab development. Continue applications through the duration of primary scab. Mix TOPGUARD Fungicide Specialty Crops with a protectant such as KOVERALL Fungicide (mancozeb) for scab control.	7 - 10
Pear Scab (<i>Venturia pirina</i>)	13	Start application at Pink Bud and continue through the duration of the Primary Scab period. Mix TOPGUARD Fungicide Specialty Crops with a protectant such as KOVERALL Fungicide for improved scab control.	7 - 10
Restrictions: <ul style="list-style-type: none"> No single application may exceed 13 fl. oz. of product/A. Do not apply more than 4 applications per year. Do not apply more than 52 fl. oz. of product/A per year. Do not apply more than 0.423 lb. ai of flutriafol/A per year. Restricted Entry Interval (REI) is 12 hours. Preharvest Interval: Do not apply within 14 days of harvest. 			

Use Directions for Stone Fruit (See below for a list of crops.)

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (<i>Podosphaera clandestina</i>)	14	Start applications at petal fall. Repeat as necessary if disease conditions are favorable for disease development.	7
Brown Rot Blossom Blight (<i>Monilinia fructicola</i>)	14	Start applications at 1-5% bloom followed by an application at 50-100 % bloom.	7
Fruit Brown Rot (<i>Monilinia fructicola</i>)	14	Apply one to two weeks prior to harvest.	7
Cherry Leaf Spot (<i>Blumeriella jaapii</i>)	14	Start applications at petal fall. Repeat as necessary if disease conditions are favorable for disease development. In areas of known triazole resistance, apply TOPGUARD Fungicide Specialty Crops with a protectant fungicide for control.	7

List of Stone Fruit: Apricot, Nectarine, Sweet Cherry, Tart Cherry, Peach, Plum, Chicksaw Plum, Damson Plum, Japanese Plum, Plumcot, Prune.

Restrictions:

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- **Preharvest Interval:** Do not apply within 7 days of harvest.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of FMC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and, to the extent consistent with applicable law, Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or FMC, and, to the extent permitted by applicable law, buyer assumes the risk of any such use.

To the extent consistent with applicable law, FMC or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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