

GROUP 3 FUNGICIDE

# TOPGUARD

## TERRA<sup>®</sup>

### FUNGICIDE

For Use on Cotton (at planting soil application only)

EPA Reg. No. 279-3594

**ACTIVE INGREDIENT:**

\*Flutriafol ..... 42.0%

**OTHER INGREDIENTS:** ..... 58.0%

**TOTAL** ..... 100.0%

\*Contains 4.16 pounds per gallon of the active ingredient flutriafol.  
Suspension concentrate.

## KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

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.)

**For MEDICAL EMERGENCY**

**1-800-331-3148**

**For SPILLS CHEMTREC**

**1-800-424-9300**

Notice: Read the entire Directions for Use, Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies 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.

See additional precautionary statements and Directions for Use in booklet.

Read the entire label before using this product.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution.** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.

Sold By

**FMC** FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104

C EPA Est. No. 70815-GA-001

W EPA Est. No. 279-IL-1

EPA Establishment Numbers (The letter before each Establishment Number above corresponds to the first letter in the lot number on the container label.)

### FIRST AID

**If swallowed:**

- 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.
- Call a poison control center or doctor immediately for treatment advice.

**If on skin:**

- 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 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.

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.

TOPGUARD is a trademark of FMC Corporation or an affiliate



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**NET CONTENTS: 2.5 Gallons**

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators must wear:** Long-sleeved shirt and long pants, chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, polyethylene, polyvinyl chloride  $\geq 14$  mils, or Viton<sup>®</sup>  $\geq 14$  mils), and shoes plus socks.

**Mixers and Loaders must wear:** Long-sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, polyethylene, polyvinyl chloride  $\geq 14$  mils, or Viton<sup>®</sup>  $\geq 14$  mils) and safety glasses.

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.

In California, this product may only be applied to fields that are not irrigated, or are irrigated using pressurized irrigation methods such as macro-sprinkler, micro-sprinkler, or drip systems.

Not for sale, distribution, or use in Nassau or Suffolk Counties of New York State.

## 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 and 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  $\frac{1}{4}$  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 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:** Do not apply this product through any type of irrigation system.

**Crop Rotation:** Fields treated with an application rate of greater than 0.228 lb 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; 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 lb 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 ai/A)
4.0	0.130
5.0	0.162
6.0	0.195
7.0	0.227
8.0	0.260

**Compatibility Jar Test:** Topguard Terra Fungicide 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.

**Tank Mixing:** Topguard Terra Fungicide 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 Terra Fungicide 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 Terra Fungicide should be applied at 6–10 gallons per acre at planting.

**Resistance Management:** Topguard Terra Fungicide 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 Terra Fungicide 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:** Use the higher rate of Topguard Terra Fungicide when the crop is grown under irrigation or when the field has a history of high root rot disease pressure.

## CROP USE DIRECTIONS

### Product Information:

Topguard Terra Fungicide works by forming a protective barrier around the cotton root at the point of disease infection. Precipitation in the form of rainfall or irrigation is required to move the product into the infection zone. The amount of water required will vary with soil type, soil moisture, and rainfall or irrigation intensity.

### Application Methods:

**T-Band Application:** Apply Topguard Terra Fungicide in a concentrated 3–4 inch wide band at planting perpendicular to row direction after furrow opening and seed placement but prior to furrow closure with press wheel.

**Modified In-Furrow Application:** Apply using a splitter/Y shaped application mechanism that directs the product on the sides of seed furrow and not in direct contact with the seed.

## Use Directions for Cotton (at planting soil application only)

Diseases	Product Rate (fl oz/A)
Cotton Root Rot ( <i>Phymatotrichopsis omnivora</i> )	4–8 (see cotton row spacing table below for rate chart depending on row width)

### Application Directions

#### Overhead or Sprinkler Irrigation Fields:

- The T-Band application method is preferred under these cropping practices.
- Modified In-Furrow can be used. Avoid applying product in direct contact with seed.

#### Dryland Fields:

- The Modified In-Furrow application technique may provide more consistent control under low rainfall conditions.
- Application using a T-Band method requires rainfall to move the product into the disease infection zone below the soil surface.

#### Furrow and Drip Irrigated Fields:

- Apply in T-Band or Modified In-Furrow.
- When using the Modified In-Furrow application method, sufficient irrigation must be applied to thoroughly wet the Topguard Terra Fungicide treated zone after cotton has emerged.
- For T-Band applications, the top of the bed must be thoroughly wetted after the cotton has emerged.

#### NOTICE for All Application Methods and Field Conditions:

Heavy rainfall or irrigation within 3 days after planting may delay emergence.

#### Restrictions:

- No single application may exceed 8 fl oz of product/A.
- Do not apply more than one soil application per year.
- Do not apply more than 0.488 lb ai flutriafol/acre per year (including soil and foliar applications).
- Do not apply with liquid fertilizer.
- Restricted-Entry Interval (REI) for all activities is 12 hours.
- Preharvest Interval: Do not apply within 30 days of harvest.

## Cotton Row Spacing Table

Cotton Row Spacing (inches)	Fluid Ounces of Product to be Applied/ 1,000 Row Feet	
	4 fl oz/A Product Rate	8 fl oz/A Product Rate
30	0.23	0.46
32	0.24	0.48
36	0.28	0.56
38	0.29	0.58
40	0.31	0.62

30" = 17,424 row ft per acre, 32" = 16,315 row ft per acre, 34" = 15,374 row ft per acre,

36" = 14,520 row ft per acre, 38" = 13,754 row ft per acre, 40" = 13,068 row ft per acre.

### Formula:

$\frac{\text{Selected Use Rate (fl oz/A)}}{\text{[Row ft for row spacing/1,000 ft.]}}$  = fl oz of product to be applied per 1,000 row ft.

### Example for 30" row spacing at 4 fl oz/A:

$\frac{4 \text{ fl oz/A}}{[17,424/1,000 \text{ ft}]}$  = 0.23 fl oz of product to be applied per 1,000 row ft.

## **WARRANTY DISCLAIMER**

FMC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## **INHERENT RISKS OF USE**

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of FMC or the Seller. All such risks shall be assumed by Buyer and User. Buyer and User agree to hold FMC and the Seller harmless for any claims related to such factors.

## **LIMITATION OF REMEDIES**

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to one of the following, at FMC's election:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, FMC shall not be liable for consequential, incidental, or special damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of FMC or the Seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.