



The Chemical Company

SPECIMEN

# Curalan<sup>®</sup> Fungicide EG



**Active Ingredient:**

Vinclozolin [3-(3, 5-dichlorophenyl)-5-ethenyl-5-methyl-2, 4-oxazolidinedione] .....50.0%

**Inert Ingredients:** .....50.0%

**Total** .....100.0%

EPA Reg. No. 7969-224

EPA Establishment No.

**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.)**

See inside for complete **First Aid, Precautionary Statements, Directions For Use** and **Conditions of Sale** and **Warranty**.

Product of Germany; Formulated in the United States with U.S. and Imported Ingredients.

FOR MORE INFORMATION, PLEASE VISIT OUR WEB SITE  
[WWW.TURFFACTS.COM](http://WWW.TURFFACTS.COM)

**Net contents:**

BASF Corporation  
Agricultural Products  
26 Davis Drive  
Research Triangle Park, NC 27709

<b>FIRST AID</b>	
If inhaled:	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
If on skin or clothing:	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If in eyes:	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).	

## **Precautionary Statements**

### **Hazards to Humans and Domestic Animals**

**Caution.** Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Do not get on skin, in eyes, or on clothing. Avoid breathing vapor or spray mist. Prolonged exposure or frequently repeated skin contact may cause allergic reactions in some individuals.

### **Personal Protective Equipment (PPE)**

#### **Mixers and loaders must wear:**

- Long sleeved shirt and long pants
- Socks and shoes
- Chemical resistant gloves made of any waterproof material
- Chemical resistant apron

#### **Applicators\*, flaggers and other handlers must wear:**

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment.

\*See **Engineering Controls** below for additional requirements.

Wash thoroughly with soap and water after handling. Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated. Do not reuse them.

Users should inform Certified Crop Advisors [as defined by the Worker Protection Standard (WPS)] that people engaged in scouting activities should wear early entry PPE when entering treated areas during the first 5 days following application to sod farm turf.

### **Engineering Controls Statement**

When handlers use closed systems or enclosed cabs 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. Applicators using airblast equipment must be in an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides for dermal protection, and:

- may wear long-sleeved shirt and long pants, socks and shoes,
- must have immediately available for use in case they must leave the cab: coveralls, chemical resistant gloves, chemical resistant footwear, and chemical resistant headgear for overhead exposure,
- take off any PPE that was worn in the treated area before reentering the cab, and
- store all such PPE in a chemical resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

This product is formulated into water-soluble packets and when used correctly, it qualifies as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water-soluble packets must:

- wear the personal protective equipment required above for mixers and loaders, and
- be provided and must have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown, coveralls and chemical resistant footwear.

## **User Safety Recommendations**

### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## Environmental Hazards

This product is toxic to fish. Do not apply directly to water, to areas where water is present, or to intertidal areas below the high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

### Ground Water Advisory

Vinclozolin has a degradation product with properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

### Surface Water Advisory

Under some conditions, the vinclozolin degradate 3,5-DCA may have a high potential for runoff into surface water (primarily via dissolution in runoff water). These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, overlying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlying tile drainage systems that drain surface water.

## 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. Do not allow this product to 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. This product is not permitted for residential use.

This product may only be used as follows:

**Industrial:** lawn and landscape areas at manufacturing sites and industrial parks.

**Golf Course:** tee boxes, greens and turf mowed at 1" or less and turf produced for construction or renovation of golf course landscape only.

## 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 (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) of **5 days** for sod farm turf.

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 over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headwear for overhead exposure

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

## Nonagricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, nurseries, or greenhouses. **Entry Restriction-**Do not enter or allow others to enter until sprays have dried.

**Table 1. Application Rates and Timing for Turfgrasses**

Disease	Application Intervals*	Preventative Treatment	
		Rate per Acre	Rate per 1,000 Square Feet
Dollar Spot	21-28 days	2.7 pounds	1 ounce
Leaf Spots and Melting Out	14-28 days	2.7 pounds	1 ounce
Red Thread and Pink Patch	14-28 days	2.7 pounds	1 ounce
Brown Patch	14-28 days	2.7 pounds	1 ounce
Gray Snow Mold**	10-21 days	2.7 pounds	1 ounce
Fusarium Patch & Pink Snow Mold**	10-21 days	2.7 pounds	1 ounce

\* Re-treat at shorter intervals or use higher rates if conditions favorable to disease exist.  
 \*\* Tank mix with **Fungo**® or **Spotrete**® for improved control.

## Storage and Disposal

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

**Pesticide Storage:** Do not store below 32° F or above 100° F. Store in a dry place away from heat or open flame.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### Container Disposal:

• **Plastic Containers:** Triple rinse container (or equivalent). Then offer for recycling or reconditioning 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.

• **Water-soluble packaging:** This package contains water-soluble bags inside a foil liner (outer bag). The bags will dissolve in water and the contents will disperse. If all the water-soluble bags are not used, carefully reseal the full bag. Do not remove the water-soluble bags from the overwrap bags except for immediate use. If exposed to moisture, the water-soluble bags may break.

## In Case of Spill

In case of large-scale spillage regarding this product, call:

CHEMTREC 1-800-424-9300  
BASF Corporation 1-800-832-HELP (4357)

### Steps to be taken in case material is released or spilled:

Keep the spilled product dry to reduce volume. Scoop up the recaptured dry product and return it to the original container. Apply product according to normal label directions. If the spilled product gets wet, add a drying agent to contain the spill and dispose of as directed.

## I. General Information

**Curalan® EG fungicide** is effective on all turfgrasses. Refer to the appendix for a list of diseases controlled.

### Mode of Action

**Curalan EG** is a contact fungicide. It should be applied preventatively to protect susceptible plant tissues from infection. **Curalan EG** inhibits spore germination. If spores have already germinated, **Curalan EG** will prevent any further growth of the germ tube.

### Crop Tolerance

Turf is tolerant to **Curalan EG** at listed stages of growth. Consult your local representative or agricultural advisor for assistance.

**Notice to user:** Due to variability within species, and in application techniques and equipment, and the number of possible tank mix combinations, neither the manufacturer nor the seller has determined whether or not **Curalan EG** can safely be used on all varieties and species of turf under all conditions. It is recommended, therefore, that the professional user determine if **Curalan EG** can be used safely before broad use by applying the recommended use

rate of **Curalan EG** on a nonlabeled species or variety under the conditions expected to be encountered on a small test area. Any adverse effects should be visible within 14 days.

### Irrigation

Allow foliage to dry after application and before irrigation.

### Coverage

Thorough coverage of all foliage is important, therefore enough spray volume and pressure must be used to achieve desired disease control.

### Cleaning Spray Equipment

Clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product.

## II. Application Instructions

Apply **Curalan EG** to turfgrass at the rates and timings indicated in **Table 1** in 1 to 4 gallons of water per 1000 square feet (40-160 gallons of water per acre) after mowing. The preventative rate of **Curalan EG** should be applied before the disease is expected to appear. Apply subsequent treatments at the preventative rate once control has been achieved.

## III. Additives

To achieve consistent disease control, an additive, such as a wetting agent, may be needed. Consult your local BASF representative for recommendations for your area.

### Compatibility Test for Mix Components

Add components in the following sequence using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

- 1) **Water:** For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2) **Products in PVA bags:** Cap the jar and invert 10 cycles.
- 3) **Water-dispersible products:** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) Cap the jar and invert 10 cycles.
- 4) **Water-soluble products:** Cap the jar and invert 10 cycles.
- 5) **Emulsifiable concentrates:** (oil concentrate or methylated seed oil when applicable) Cap the jar and invert 10 cycles.
- 6) **Water-soluble additives:** Cap the jar and invert 10 cycles.
- 7) Let the solution stand for 15 minutes.
- 8) **Evaluate** the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. Do not use any spray solution that could clog spray nozzles.

## IV. Mixing Order

- 1) **Water:** Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2) **Products in PVA bags:** Place the water-soluble PVA bag into the mixing tank. The water-soluble PVA bag will dissolve in water to allow the contents to disperse. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.  
To prepare spray solution for aerial application, use a mixing tank or mixing vat first to get product into suspension before transferring suspension to air application equipment.
- 3) **Water-dispersible products:** (such as, **Curalan® EG fungicide**, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
- 4) **Water-soluble products:**
- 5) **Emulsifiable concentrates** (oil concentrate or methylated seed oil when applicable)
- 6) **Water-soluble additives** (AMS or UAN when applicable)
- 7) Remaining quantity water

Maintain constant agitation during application. For more information, refer to section **V. Tank Mixing Information**

## V. General Tank Mixing Information

Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

### Tank Mix Partners/Components

The following products may be tank mixed with **Curalan EG** according to the specific tank mixing instructions in this label and respective product labels.

- **Fungo® fungicide**
- **Spotrete® fungicide**

BASF does not recommend using tank mixes other than those listed on BASF labeling. Physical incompatibility, reduced disease control, or crop injury may result from mixing **Curalan EG** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Local agricultural authorities may be a source of information when using other than BASF recommended tank mixes.

**Table 2. Turf Restrictions and Limitations**

Turf	Minimum Time from Application to Harvest (PHI) Intervals*	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding	Aircraft Application
Turfgrasses	n/a	8 pounds	No	No

## VI. General Restrictions and Limitations

- **Do not apply this product to turf for transplant purposes except for sod produced for golf course establishment or renovation.**
- **Do not apply to turf at locations serving as residences.**
- **Do not treat sod produced for transplant to residential or commercial landscapes.**
- Turf cultured for transplant (**golf course establishment and renovation purposes only**) must be mechanically harvested.
- **Maximum seasonal use rate:** Do not apply more than a **total of 8 pounds of Curalan EG** per acre (3 ounces per 1,000 square feet) per season.
- Restricted Entry Interval (REI): 5 days for sod farm turf.
- Do not apply to areas likely to be grazed by livestock and do not feed clippings to livestock or poultry.
- Do not apply through any type of irrigation equipment.
- Do not apply this product by air.
- This product cannot be used to formulate or reformulate any other pesticide product.

## Crops

This product can be used on the following crops:

### Turfgrasses

Look inside for complete **Restrictions and Limitations** and **Application Instructions**.

## Diseases listed in this label:

Common Name	Scientific Name
Brown Patch	<i>Rhizoctonia solani</i>
Dollar Spot	<i>Sclerotinia homoeocarpa</i> ; <i>Lanzia</i> sp.; <i>Moellerodiscus</i> sp.
Fusarium Patch	<i>Fusarium nivale</i>
Pink Snow Mold	<i>Microdochium</i>
Gray Snow Mold	<i>Typhula incarnata</i>
Helminthosporium	<i>Helminthosporium</i>
Leaf Spots	<i>Drechslera</i> spp.
Melting Out	<i>Bipolaris</i> sp.
Pink Patch	<i>Limonomycetes roseipellis</i>
Red Thread	<i>Laetisaria fuciformis</i> <i>Ciborinia</i>

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause cancer.

## 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 should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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*Spotreite ia a registered trademark of W. A. Cleary Chemical Company.*

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