

# Topaz®

GROUP 3 FUNGICIDE

PEEL HERE TO OPEN ▲

**Broad-spectrum fungicide for control of plant, turf and ornamental diseases**

**ACTIVE INGREDIENT:**

Propiconazole (CAS No. 60207-90-1) ..... 41.8%

**OTHER INGREDIENTS\*** ..... 58.2%

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

Contains 3.6 lbs. of propiconazole per gallon.

\*Contains petroleum distillates.

## 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 this label, find someone to explain it to you in detail.)

**FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE,  
CALL CHEMTREC (800) 424-9300**

See additional precautionary statements and  
directions for use inside booklet.

### FIRST AID

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. **If on skin or clothing:** 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:** Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. **NOTE TO PHYSICIAN:** Contains petroleum distillate - vomiting may cause aspiration pneumonia.

### HOT LINE NUMBER

In case of a medical emergency call 1-877-424-7452 or a transport emergency, call CHEMTREC toll free at 1-800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

43401AS0022

AD042613

**NET CONTENTS: 2.5 GALLONS (9.46L)**

EPA Reg. No. 42750-211-1381

EPA Est No. 42750-MO-002

DISTRIBUTED BY:

WINFIELD SOLUTIONS, LLC

P.O. BOX 64589, ST. PAUL, MN 55164-0589

1/1128/7

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING/AVISO:** Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Harmful if swallowed, inhaled, or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid breathing spray mist. This product may cause skin sensitization reactions in certain individuals.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. For terrestrial uses, 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.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill, or store near heat or open flame.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in the original container in a cool place.

**PESTICIDE DISPOSAL:** Pesticide wastes may be toxic. 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 of the nearest EPA Regional Office for guidance.

#### CONTAINER DISPOSAL:

**Plastic Containers:** Triple rinse: Clean the container as described in "Container Rinsing Instructions" below.

**For Bulk and Mini-Bulk Containers:** Clean the container as described in "Container Rinsing Instructions" below.

**Container Rinsing Instructions:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**CONTAINER PRECAUTIONS:** Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.

#### Refill Only With TOPAZ® Fungicide.

The contents of this container cannot be completely removed by cleaning. Refilling with materials other than TOPAZ® Fungicide will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.**

UNITY #1567948



FUNGICIDE

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**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**NOTE TO PHYSICIAN:** Contains petroleum distillate-vomiting may cause aspiration pneumonia.

### HOT LINE NUMBER

In case of a medical emergency call 1-877-424-7452 or a transport emergency, call CHEMTREC toll free at 1-800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.



(01)00884464617703

UNITY #1567948

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## PRECAUTIONARY STATEMENTS

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### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING/AVISO:** Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Harmful if swallowed, inhaled, or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid breathing spray mist. This product may cause skin sensitization reactions in certain individuals.

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### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category G on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

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### USER SAFETY REQUIREMENTS

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Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

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### ENGINEERING CONTROL STATEMENTS

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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.

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### 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.

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### ENVIRONMENTAL HAZARDS

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This pesticide is toxic to fish. For terrestrial uses, 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.

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### PHYSICAL OR CHEMICAL HAZARDS

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Do not use, pour, spill, or store near heat or open flame.

**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.**

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### DIRECTIONS FOR USE

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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 responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (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 12 hours. **Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

## PRODUCT INFORMATION

TOPAZ® Fungicide is a broad-spectrum fungicide labeled for the control of many diseases.

**FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, OR ILLEGAL RESIDUES.**

## PRODUCT USE PRECAUTIONS

**Important:** Do not use TOPAZ® Fungicide in greenhouses or as a tree injection.

### Rotational Crops

To avoid possible illegal residues, do not plant any other crop intended for food, grazing, or any component of animal feed within 105 days of TOPAZ® Fungicide application to the preceding crop, unless the second crop appears on this label. Alfalfa can be planted 75 days after the last TOPAZ® Fungicide application if the total application of propiconazole has not exceeded 0.22 lb. a.i./A during the previous year.

### Integrated Pest Management

TOPAZ® Fungicide should be integrated into an overall disease and pest management strategy (IPM) whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area. TOPAZ® Fungicide may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

## RESISTANCE MANAGEMENT

### GROUP 3 FUNGICIDE

TOPAZ® Fungicide is in the Group 3 class fungicides. TOPAZ® Fungicide acts as a demethylation inhibitor of sterol biosynthesis (DMI) which disrupts membrane synthesis by blocking demethylation. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or State agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. WINFIELD SOLUTIONS, LLC Crop Protection encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label. TOPAZ® Fungicide should not be alternated or tank mixed with any fungicide to which resistance has already developed.

## SPRAY EQUIPMENT

Thorough coverage is necessary to provide good disease control.

To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap, as crop injury may occur.

Air-assisted or airstream sprayers move spray droplets into the canopy using a forced airstream. Set up the fan to deliver only enough air volume to penetrate the canopy and provide good coverage. Adjust deflectors or other aiming devices to direct spray only to the target area.

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate sprayer before use.

Use a pump with capacity to: (1) maintain 35–40 psi at nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension – this requires recirculation of 10% of tank volume per minute. Use a jet agitator or liquid sparge tube for agitation. Do not air sparge.

Although TOPAZ® Fungicide is an emulsifiable concentrate, it is suggested that screens be used to protect the pump and to prevent nozzles from clogging. Screens placed on suction side of pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current State agricultural recommendations.

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## MIXING INSTRUCTIONS

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Prepare no more spray mixture than is required for the immediate operation. Thoroughly clean spray equipment before using this product. Agitate the spray solution before and during application. Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsewater by application to an already treated area.

**TOPAZ® Fungicide Alone:** Add 1/2–2/3 of the required amount of water to the spray or mixing tank. With the agitator running, add the TOPAZ® Fungicide to the tank. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the TOPAZ® Fungicide has completely dispersed into the mix water. Maintain agitation until all of the mixture has been sprayed.

**TOPAZ® Fungicide + Tank Mixtures:** TOPAZ® Fungicide is usually compatible with all tank mix partners listed on this label. To determine the physical compatibility of TOPAZ® Fungicide with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

Add 1/2–2/3 of the required amount of water to the spray or mixing tank. With the agitator running, add the tank mix partner into the tank. Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and the TOPAZ® Fungicide to the spray tank. Allow the TOPAZ® Fungicide to completely disperse. Spray the mixture with the agitator running.

If using TOPAZ® Fungicide in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate may be exceeded, and the most restrictive label precautions and limitations must be followed. This product may not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

Do not mix TOPAZ® Fungicide with Syllit® or crop injury may occur.

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## APPLICATION INSTRUCTIONS

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Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply in a manner that will result in exposure to humans or animals.

**Ground Application:** For tree crops, apply in a minimum of 50 gallons of water per acre unless specified otherwise. For other crops, apply in a minimum of 10 gallons of water per acre unless specified otherwise.

**Aerial Application:** For tree crops, apply in a minimum of 10 gallons of water/A unless specified otherwise. For other crops, apply in a minimum of 2 gallons of water per acre unless specified otherwise.

**Application Through Irrigation Systems (Chemigation):** Apply TOPAZ® Fungicide through irrigation equipment only to crops for which chemigation is specified on this label.

For chemigation, apply in 0.1–0.25 inch of water. Chemigation with excessive water may lead to a decrease in efficacy.

TOPAZ® Fungicide, alone or in combination with other pesticides which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. 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.

**Notes:** Do not inject TOPAZ® Fungicide at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part TOPAZ® Fungicide. TOPAZ® Fungicide is corrosive to many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton, Buna-N, Neoprene, or PVC seals.

## Operating Instructions

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 backflow.
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 interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended.

## Center Pivot Irrigation Equipment

**Notes:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating TOPAZ® Fungicide through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply 1/8–1/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying TOPAZ® Fungicide through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80–95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of TOPAZ® Fungicide required to treat the area covered by the irrigation system.
- Add the required amount of TOPAZ® Fungicide and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the TOPAZ® Fungicide solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the TOPAZ® Fungicide solution has cleared the sprinkler head.

## Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30-minute interval. When applying TOPAZ® Fungicide through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of TOPAZ® Fungicide required to treat the area covered by the irrigation system.
- Add the required amount of TOPAZ® Fungicide into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the TOPAZ® Fungicide solution has cleared the last sprinkler head.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Almonds	Brown Rot Blossom Blight ( <i>Monilinia laxa</i> , <i>M. fructicola</i> )	4–8	Apply TOPAZ® Fungicide at 5–10% bloom and 50–100% bloom. Under severe disease conditions, use the highest rate. Minimum retreatment interval is 7 days.
	Anthraco-nose ( <i>Collectotrichum acutatum</i> )	8	Apply TOPAZ® Fungicide beginning at bud break on a 7- to 14-day interval.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, sufficient water volume should be used to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application (a minimum of 15 gals./A).

### Specific Use Restrictions:

- 1) Do not apply more than 32 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply more than 0.90 lb. a.i. propiconazole-containing product/A/season.
- 3) Do not apply within 60 days of harvest.
- 4) Do not graze livestock in treated areas or cut treated cover crop for feed.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Banana and Plantains	Black Sigatoka <i>(Mycosphaerella fijiensis)</i>	3	Apply TOPAZ® Fungicide before disease symptoms appear at the onset of the rainy season. Apply 3 fl. oz. of TOPAZ® Fungicide/A in 10–20 gallons of water/A. Apply no more than 2 consecutive applications on a 21- to 25-day schedule before rotating to another labeled product with a different mode of action for at least 2 sprays. A maximum of 8 applications can be made. If possible, it is recommended to have at least 2 consecutive months “triazole-free” during the period of lower disease pressure.
<p><b>Mixing Procedure</b></p> <p><u>Oil-in-Water Emulsion</u></p> <ol style="list-style-type: none"> <li>1. Add the crop oil to the spray tank.</li> <li>2. Add the emulsifier (0.6 fl. oz./gal. of oil) and TOPAZ® Fungicide to the spray tank and mix thoroughly for 5 minutes.</li> <li>3. Add water to the spray tank and mix thoroughly for 15 minutes.</li> </ol> <p><u>Oil Alone</u></p> <ol style="list-style-type: none"> <li>1. Add crop oil to the spray tank.</li> <li>2. Add the TOPAZ® Fungicide to the spray tank and mix thoroughly for 5 minutes.</li> </ol> <p>Maintain agitation.</p>			
<p><b>Specific Use Restrictions:</b></p> <ol style="list-style-type: none"> <li>1) Do not apply TOPAZ® Fungicide within 100 yards of non-bagged bananas.</li> <li>2) Do not apply TOPAZ® Fungicide on bananas unless they are protected by polyethylene bags.</li> <li>3) Do not apply TOPAZ® Fungicide on plantains if the fruit present are not protected by polyethylene bags.</li> <li>4) Do not apply more than 24 fl. oz. of TOPAZ® Fungicide during each growing season (this includes any pre-harvest sprays).</li> <li>5) Do not feed whole bananas and plantains to animals.</li> <li>6) Do not apply more than 0.67 lb. a.i. propiconazole-containing product/A/season.</li> </ol>			

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Beets, garden	Leaf Spot <i>(Cercospora beticola)</i> Powdery Mildew <i>(Erysiphe polygoni)</i>	3–4	Begin applications at first sign of disease. Repeat on a 14-day interval. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action.  If disease levels continue to increase, immediately switch to a fungicide with a different mode of action.
<p><b>Application:</b> TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application (a minimum of 15 gals./A).</p>			
<p><b>Specific Use Restrictions:</b></p> <ol style="list-style-type: none"> <li>1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.</li> <li>2) Do not apply within 14 days of harvest.</li> <li>3) Do not apply more than 0.45 lb. a.i. propiconazole-containing product/A/season.</li> </ol>			

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Berries* *Bushberries Bingleberry, Blackberry, Blueberry, Boysenberry, Currants, Dewberry, Elderberry, Gooseberry, Huckleberry	Mummyberry Disease ( <i>Monilinia vaccinocorymbosi</i> )	6	Make first application of TOPAZ® Fungicide beginning at green tip and repeat in 7–10 days. If conditions are favorable for disease development, additional applications may need to be made at pink bud and repeating every 7–10 days through petal fall.
	Leaf Spot and Stem Canker ( <i>Septoria albopunctata</i> ) Rust ( <i>Pucciniastrum vaccinii</i> )	6	Apply when conditions favor disease development. Repeat applications on a 4-week spray interval.
*Caneberries Loganberry, Lowberry, Marionberry, Olallieberry, Red and Black Raspberry, Youngberry	Leaf and Cane Spot ( <i>Septoria rubi</i> )	6	Apply as a delayed dormant spray after training in the spring. Repeat this application in the late spring, again at bud break, and again once flowering has begun.
Juneberry Lingonberry Salal	Powdery Mildew ( <i>Microsphaera vaccinii</i> )	6	Apply TOPAZ® Fungicide at 5–10% bloom. Repeat this application at full bloom and on a 14-day interval while conditions are favorable for disease development.
And cultivars and/or hybrids of these.	Leaf Spot ( <i>Septoria</i> spp.)	6	Make first application any time prior to bloom and again after petal fall. If needed, repeat application just after harvest.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground (a minimum of 5 gals./A) or aerial application (a minimum of 15 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 30 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 30 days of harvest.
- 3) Do not apply more than 0.84 lb. a.i. propiconazole-containing product/A/season.



CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Carrots	Leaf Blights ( <i>Cercospora carotae</i> ) (suppression of <i>Alternaria dauci</i> )	4	Apply 4 oz. of TOPAZ® Fungicide when conditions favor disease development. Continue applications on a 7- to 10-day interval, using the shorter interval when disease conditions are severe. If desired, a spreader-sticker may be used.
	Powdery Mildew ( <i>Erysiphe polygoni</i> )	TOPAZ® Fungicide plus chlorothalonil  2	Apply 2 oz. of TOPAZ® Fungicide with 0.75 lb. a.i. of chlorothalonil/A. Begin applications when conditions favor disease development. Continue applications on a 7- to 10-day interval.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground (a minimum of 15 gals./A) or aerial application (a minimum of 5 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 14 days of harvest.
- 3) Do not apply more than 0.45 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Celery and Leaf Petioles subgroup Celery Celery, Chinese Cardoon Celtuce Fennel, Florence Rhubarb Swiss Chard	Early Blight ( <i>Cercospora apii</i> )  Late Blight ( <i>Septoria apicola</i> )	4	Apply TOPAZ® Fungicide on a 7-day schedule, either by ground or aerial application. If desired, TOPAZ® Fungicide may be mixed with appropriate spreader-sticker.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground (a minimum of 10 gals./A) or aerial application (a minimum of 5 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 14 days of harvest.
- 3) Do not apply more than 0.45 lb a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Cereals Wheat  See next section for other cereals.	Early Season Suppression of: Powdery Mildew ( <i>Blumeria</i> spp., <i>Erysiphe</i> spp.) Leaf Blight ( <i>Septoria tritici</i> ) Glume Blotch ( <i>Stagonospora nordorum</i> ) Tan Spot ( <i>Pyrenophora tritici-repentis</i> )	2-4	Apply TOPAZ® Fungicide in the spring. Follow up with a second application up to Feekes growth stage 10.5 for season-long control. Applications may be made not closer than a 14-day interval.
	Control of Leaf Diseases: Rust ( <i>Puccinia</i> spp.) Powdery Mildew ( <i>Blumeria</i> spp., <i>Erysiphe</i> spp.) Leaf Blight ( <i>Septoria tritici</i> ) Glume Blotch ( <i>Stagonospora nordorum</i> ) Tan Spot ( <i>Pyrenophora tritici-repentis</i> ) Helminthosporium Leaf Blight ( <i>Drechslera tritici-repentis</i> ) Spot Blotch ( <i>Bipolaris sorokiniana</i> ) Net Blotch ( <i>Pyrenophora teres</i> )	4	Protecting the flag leaf is important for maximizing the potential yield. Highest yields are normally obtained when TOPAZ® Fungicide is applied when the flag leaf is 50% to fully emerged. Applications may be made no closer than a 14-day interval. The use of oil-based adjuvant may improve the spray coverage and canopy penetration. TOPAZ® Fungicide can be applied through full head emergence (Feekes growth stage 10.5). Do not apply after this stage to avoid possible illegal residues.
	Foot Rot ( <i>Pseudocercospora</i> spp.)	4	Apply TOPAZ® Fungicide plus half rates of other EPA-registered fungicides such as Topsin® M. Apply at tillering, but before elongation has occurred.
	Fusarium Head Blight Suppression	4	Apply TOPAZ® Fungicide at approximately 50% flowering. Addition of a penetrating type of adjuvant may increase Fusarium head blight suppression.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by ground, air or chemigation.

**Specific Use Restrictions:**

- 1) Do not apply within 30 days of harvest for forage or hay.
- 2) Do not apply more than 8 fl. oz./A/season of TOPAZ® Fungicide.
- 3) Do not apply more than 4 fl. oz./A/season of TOPAZ® Fungicide if forage or hay will be harvested.
- 4) Do not apply more than 0.22 lb. a.i. propiconazole-containing product/A/season.
- 5) Do not apply after Feekes 10.5 in wheat.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Cereals Barley Rye Triticale Oats	Early Season Suppression of: Powdery Mildew ( <i>Blumeria</i> spp., <i>Erysiphe</i> spp.) Leaf Blight ( <i>Septoria tritici</i> ) Glume Blotch ( <i>Stagonospora nordorum</i> ) Tan Spot ( <i>Pyrenophora tritici-repentis</i> )	2-4	Apply TOPAZ® Fungicide in the spring. Follow up with a second application up to Feeks growth stage 10.5 for season-long control. Applications may be made not closer than a 14-day interval.
	Control of Leaf Diseases: Rust ( <i>Puccinia</i> spp.) Powdery Mildew ( <i>Blumeria</i> spp., <i>Erysiphe</i> spp.) Leaf Blight ( <i>Septoria tritici</i> ) Glume Blotch ( <i>Stagonospora nordorum</i> ) Tan Spot ( <i>Pyrenophora tritici-repentis</i> ) Helminthosporium Leaf Blight ( <i>Drechslera tritici-repentis</i> ) Spot Blotch ( <i>Bipolaris sorokiniana</i> ) Barley Scald ( <i>Rhynchosporium secalis</i> ) Barley Stripe ( <i>Pyrenophora graminea</i> ) Net Blotch ( <i>Pyrenophora teres</i> )	4	Protecting the flag leaf is important for maximizing the potential yield. Highest yields are normally obtained when TOPAZ® Fungicide is applied when the flag leaf is 50% to fully emerged. Applications may be made no closer than a 14-day interval. The use of oil-based adjuvant may improve the spray coverage and canopy penetration. TOPAZ® Fungicide can be applied up to 45 days prior to harvest.
	Foot Rot ( <i>Pseudocercospora</i> spp.)	4	Apply TOPAZ® Fungicide plus half rates of other EPA-registered fungicides such as Topsin® M. Apply at tillering, but before elongation has occurred.
	Fusarium Head Blight Suppression	4	Apply TOPAZ® Fungicide at approximately 50% flowering. Addition of a penetrating type of adjuvant may increase Fusarium head blight suppression.
<b>Application:</b> TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by ground, air or chemigation.			
<b>Specific Use Restrictions:</b> 1) Do not apply within 30 days of harvest for forage or hay. 2) Do not apply more than 8 fl. oz./A/season of TOPAZ® Fungicide. 3) Do not apply more than 4 fl. oz./A/season of TOPAZ® Fungicide if forage or hay will be harvested. 4) Do not apply more than 0.22 lb. a.i. propiconazole-containing product/A/season. 5) Do not apply within 45 days of harvest for grain and straw or for cereals other than wheat.			

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Citrus (non-bearing) Calamondin Citron Citrus hybrids Grapefruit Kumquat Lemon Lime Mandarin Orange (sour and sweet) Pummelo Satsuma Mandarin Tangerine Including all cultivars and/or hybrids of these.	Greasy Spot ( <i>Mycosphaerella citri</i> )	6–8	Begin applications in June. Apply on 30-day interval through August.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by ground or aerial application (a minimum of 15 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 24 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply to citrus that will bear harvestable fruit within 12 months.
- 3) Do not apply more than 0.67 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Corn Field Seed Popcorn  Sweet Corn	Northern Corn Leaf Blight ( <i>Setosphaeria turcica</i> ) Northern Corn Leaf Spot ( <i>Cochliobolus carbonum</i> ) Southern Corn Leaf Blight ( <i>Cochliobolus heterostrophus</i> )  Also known as Helminthosporium Leaf Blights ( <i>H. maydis</i> , <i>H. turcicum</i> , <i>H. carbonum</i> )	2–4	For leaf blights apply TOPAZ® Fungicide when disease first appears. Continue on a 7- to 14-day schedule. Use the low rate when disease pressure is low. Under heavy disease pressure or if conditions are favorable for disease, apply the high rate.
	Rusts ( <i>Puccinia</i> spp.) Gray Leaf Spot ( <i>Cercospora zeae-maydis</i> ) Eye Spot ( <i>Aureobasidium zeae</i> )	4	Apply TOPAZ® Fungicide when disease first appears. If conditions favorable for disease persist, continue to apply on a 7- to 14-day schedule. For best disease control, early applications (at initial disease onset) perform better.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by ground, air or chemigation.

**Specific Use Restrictions:**

**For Field Corn, Field Grown for Seed, and Popcorn**

- 1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 30 days of harvest for forage, grain and stover.
- 3) Do not apply more than 8 fl. oz./A/season of TOPAZ® Fungicide on field corn harvested for forage.
- 4) Do not apply more than 0.45 lb. a.i. propiconazole-containing product/A/season.

**For Sweet Corn:**

- 1) Do not apply within 14 days of harvest for ears.
- 2) Do not apply within 14 days of harvest for forage.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Cranberries	Cottonball ( <i>Monilinia oxycocci</i> )	4–6	Make the first application at leaf bud break and repeat in 14 days. Make the third application at early bloom and repeat in 14 days. Under severe pressure, use the higher rate for control.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application (a minimum of 20 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 24 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 45 days of harvest for cranberries.
- 3) Do not apply more than 0.67 lb. a.i. propiconazole-containing product/A/season.
- 4) Use is limited to OR, WA and WI.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Filberts (Hazelnuts)	Eastern Filbert Blight ( <i>Anisogramma anomala</i> )	5–8	Begin applications when green leaf tissue becomes visible and continue on a 14- to 21-day interval. Under severe disease conditions, use the higher rate and shorter interval. <b>NOTE:</b> On certain varieties, TOPAZ® Fungicide applications may cause smaller and/or greener leaves. Yields of filberts displaying these characteristics have not been reduced due to TOPAZ® Fungicide treatments.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application (a minimum of 15 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 32 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply more than 0.90 lb. a.i. propiconazole-containing product/A/season.
- 3) Do not apply within 60 days of harvest.
- 4) Do not graze livestock in treated areas or cut treated cover crop for feed.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Grasses Grown for Seed	Rusts ( <i>Puccinia</i> spp.) Powdery Mildew ( <i>Erysiphe graminis</i> ) Selenophoma Stem Eyespot ( <i>Selenophoma</i> spp.) Ergot Stem Diseases	4–8	Apply TOPAZ® Fungicide when powdery mildew infections, Selenophoma infections, and/or rust pustules are noticeable and increasing in number in late spring or early summer. Apply on a 14- to 21-day interval. To maximize control of severe rust pressure, apply 8 fl. oz./A and make applications at 14-day intervals until the seed is mature. Make the last application at least 20 days before seed matures. For bluegrass, it is important to begin application early in the growing season.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground, air (a minimum of 10 gals./A), or chemigation.

**Specific Use Restrictions:**

- 1) Do not feed hay cut within 20 days of the last application.
- 2) Do not graze treated areas within 140 days of the last application.
- 3) Do not apply more than 32 fl. oz./A/season of TOPAZ® Fungicide.
- 4) Do not apply more than 0.90 lb. a.i. propiconazole-containing product/A/season.
- 5) Use is limited to ID, MN, NE, OR, and WA.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Mint Peppermint Spearmint	Rust ( <i>Puccinia menthae</i> )	4	Begin applications when the plants are 2–4 inches high or when conditions become favorable for disease development. Make a second application 14 days after the first application.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground in a minimum of 20 gals./A.

**Specific Use Restrictions:**

- 1) Do not apply within 30 days of harvest.
- 2) Do not apply more than 8 fl. oz./A/season of TOPAZ® Fungicide.
- 3) Do not apply more than 0.22 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Onions (Dry Bulbs) Garlic Onions (Dry Bulb) Shallots (Dry Bulb) Onions (Green) Green Onions Green Shallots Green Eschalots Japanese Bunching Onions Leeks Spring Onions Scallions And/or cultivars or hybrids of these.	Purple Blotch ( <i>Alternaria porri</i> )  Suppression of Botrytis Leaf Blight ( <i>Botrytis squamosa</i> )	TOPAZ® Fungicide solo  4–8	Begin applications when conditions favor disease development and continue on a 7- to 10-day interval. Use the higher rate and shorter interval when disease conditions are severe.
		TOPAZ® Fungicide plus tank mix partner  2–4	Apply 2–4 oz. of TOPAZ® Fungicide in combination with another fungicide registered for control of botrytis leaf blight or purple blotch. Begin applications when conditions favor disease development and continue on 7-day interval or according to the tank mix partner label. Use the higher rate when disease conditions are severe. To achieve optimum disease control use a wetting agent or spreader-sticker.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground (a minimum of 15 gals./A) or aerial application (a minimum of 5 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 14 days of harvest on dry bulb onions.
- 3) TOPAZ® Fungicide may be applied at 0 day PHI (day of harvest) for green onion types.
- 4) Do not apply more than 0.45 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Parsley, fresh and dried leaves  Cilantro (Coriander), leaves	Leaf Spot ( <i>Cercospora</i> spp.) Leaf Spot ( <i>Alternaria</i> spp.) Powdery Mildew ( <i>Erysiphe</i> spp.)	3–4	Begin applications at first sign of disease. Repeat on a 14-day interval. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action.  If disease levels continue to increase, immediately switch to a fungicide with a different mode of action.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground, air, or chemigation.

**Specific Use Restrictions:**

- 1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 14 days of harvest.
- 3) Do not apply more than 0.45 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Pecans	Pecan Scab ( <i>Cladosporium caryigenum</i> ) Downy Spot ( <i>Mycosphaerella caryigena</i> ) Liver Spot ( <i>Gnomonia caryae pv pecanae</i> ) Vein Spot ( <i>Gnomonia nerviseda</i> ) Zonate Leaf Spot ( <i>Cristulariella moricola</i> ) Powdery Mildew ( <i>Microsphaera penicillata</i> )	4–8	<b>Pecan scab:</b> Apply 4–8 fl. oz./A on a 14-day schedule during bud break and pre-pollination sprays. Apply 6–8 fl. oz./A during nut formation and cover sprays. Use higher rates when disease pressure is heavier. <b>Other listed foliar diseases:</b> Apply 4 fl. oz./A with other registered pecan products labeled for these mid- to late-season foliar diseases. Observe all directions, precautions, and limitations for the other products.

**Application:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application (a minimum of 20 gals./A).

The active ingredient(s) in this product may have effects on Federally-listed threatened and endangered species or critical habitat in some counties. When using this product, you must follow the measures contained in the County Bulletin for the county in which you are applying the pesticide. To determine whether your County has a Bulletin, consult <http://www.epa.gov/espp/bulletins.htm>. Bulletins also may be available from local pesticide dealers, Extension offices, or State pesticide agencies.

**Specific Use Restrictions:**

- 1) Do not apply more than 32 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply after shuck split.
- 3) Do not apply more than 0.90 lb. a.i. propiconazole-containing product/A/season.
- 4) Do not graze livestock in treated areas or cut treated cover crop for feed.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Pineapple (Hawaii only)	Butt rot ( <i>Ceratocystis paradoxa</i> )	0.75 fl. oz./ 100 gals. of water (1:17,000)	Treatments can be made in either a cold or hot water dip. <b>Cold Water Dip:</b> Immerse crowns to give thorough wetting, remove, and allow to drain. <b>Hot Water Dip:</b> Maintain water temperature at 125°F (52°C). Soak crown for 20–30 minutes, remove, and allow to drain.

**Specific Use Restrictions:**

- 1) Do not use treated crowns for food or feed.
- 2) Do not graze while plant is growing.
- 3) Do not graze tops until fruit is harvested.
- 4) Dispose of used dip solution according to local, State, and Federal regulations.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Pistachios	Botryosphera Panicle and Shoot Blight ( <i>Botryosphera dothidea</i> )	5–8	Begin applications when green leaf tissue becomes visible and continue on a 14- to 21-day interval. Under severe disease conditions, use the higher rate and the shorter interval. <b>NOTE:</b> Under certain conditions TOPAZ® Fungicide applications may cause smaller and/or greener leaves. Yields of pistachios displaying these characteristics have not been reduced due to TOPAZ® Fungicide treatments.

**Applications:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application (a minimum of 15 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 32 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 60 days of harvest.
- 3) Do not apply more than 0.90 lb. a.i. propiconazole-containing product/A/season.
- 4) Do not graze livestock in treated areas or cut treated cover crop for feed.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Rice	Sheath Blight <i>(Rhizoctonia solani)</i> Brown Leaf Spot <i>(Helminthosporium oryzae)</i> Narrow Brown Leaf Spot <i>(Cercospora oryzae)</i> Leaf Smut <i>(Entyloma oryzae)</i> Sheath Spot <i>(Rhizoctonia oryzae)</i> Kernel Smut <i>(Tilletia barclayana)</i> Aggregate Sheath Spot <i>(Rhizoctonia oryzae-sativa)</i> Black Sheath Rot <i>(Gaeumannomyces graminis)</i>  For disease suppression of: False Smut <i>(Ustilagoidea vires)</i> Stem Rot <i>(Sclerotium oryzae)</i>	6–10	Timing of TOPAZ® Fungicide application will depend on disease severity, disease complex and rice variety/growth stage. Consult local Extension experts for local economic thresholds established for various rice varieties and diseases. TOPAZ® Fungicide should be applied on either of the following schedules as an aerial spray in 5–10 gals. of water/A. A. 6 fl. oz. at first internode elongation (up to 2-inch panicle) and repeat at swollen boot. Make the second application 14 days after the first application, but before the boot splits and head emerges. TOPAZ® Fungicide provides best control of sheath blight when the first application is applied at disease appearance in the field. The first application is recommended when 5% or fewer of the tillers are infected. B. 10 fl. oz./A at first internode elongation (up to 2-inch panicle). The 10 oz. rate is recommended if greater than 10% of the tillers are infected with sheath blight. If disease reappears, use another registered fungicide for the second application.  <b>Tank mix option:</b> Apply 6 fl. oz./A of TOPAZ® Fungicide in a tank mix with Quadris or other fungicides for control of rice diseases.
Wild Rice (MN only)	Helminthosporium Leaf Blight <i>(Helminthosporium sp.)</i> Brown Spot <i>(Bipolaris spp.)</i>	6–8	Apply 6 fl. oz./A of TOPAZ® Fungicide at both booting and heading, or make a single application of 8 fl. oz./A at booting.  Minimum re-application interval is 10 days.
<b>Applications:</b> TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by air.			
The active ingredient(s) in this product may have effects on Federally-listed threatened and endangered species or critical habitat in some counties. When using this product, you must follow the measures contained in the County Bulletin for the county in which you are applying the pesticide. To determine whether your County has a Bulletin, consult <a href="http://www.epa.gov/espp/bulletins.htm">www.epa.gov/espp/bulletins.htm</a> . Bulletins also may be available from local pesticide dealers, Extension offices, or State pesticide agencies.			
<b>Specific Use Restrictions:</b>			
<ol style="list-style-type: none"> <li>1) Do not apply to stubble or ratoon crop rice.</li> <li>2) Do not use in rice fields where commercial farming of crayfish will be practiced.</li> <li>3) Do not drain water from treated rice fields into ponds used for commercial fish farming.</li> <li>4) Do not use water drained from treated fields to irrigate other crops.</li> <li>5) Do not apply more than 12 fl. oz./A/season of TOPAZ® Fungicide.</li> <li>6) Do not apply within 35 days of harvest.</li> <li>7) Do not apply more than 0.34 lb. a.i. propiconazole-containing product/A/season.</li> <li>8) Do not release flood water within 7 days of an application.</li> </ol>			



CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Sorghum	Ergot ( <i>Claviceps sorghi</i> )	3–4	Make the first application at or just prior to flowering. Repeat on a 5- to 7-day interval. Apply up to 4 times.
<p><b>Applications:</b> TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground (a minimum of 15 gals./A) or aerial application (a minimum of 10 gals./A).</p> <p><b>Specific Use Restrictions:</b></p> <ol style="list-style-type: none"> <li>1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.</li> <li>2) Do not apply within 30 days of harvest for forage.</li> <li>3) Do not apply within 21 days of harvest for grain and stover.</li> <li>4) Do not graze livestock or cut for green chop or silage within 30 days of application.</li> <li>5) Do not apply more than 8 fl. oz. of TOPAZ® Fungicide (0.22 lb. a.i. propiconazole) on sorghum harvested for forage.</li> <li>6) Do not apply more than 0.45 lb. a.i. propiconazole-containing product/A/season.</li> </ol>			

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Soybeans	Aerial Web Blight ( <i>Rhizoctonia solani</i> )  Anthracnose ( <i>Colletotrichum truncatum</i> )  Brown Spot ( <i>Septoria glycines</i> )  Frogeye Leaf Spot ( <i>Cercospora soja</i> )  Soybean Rust ( <i>Phakopsora pachyrhizi</i> )	4–6	<p><b>Aerial Web Blight:</b> Apply 5–6 fl. oz./A at the first appearance of disease and repeat the application 14–21 days later. Under severe disease conditions use the higher rate and shorter interval.</p> <p><b>Other foliar diseases:</b> Apply 6 fl. oz./A at growth stage R3 (early pod set when pods are 1/8–1/4 inch long) and 14–21 days later at growth stage R5 (pod fill).</p> <p><b>Soybean rust:</b> Apply 4–6 fl. oz./A at first indication that disease is in the area. For best control, prevention applications work best. Repeat on 14- to 21-day interval. Use higher rate and shorter interval when disease is present in field and incidence is less than 2% (2 plants in 100 are infected). If incidence is greater than this or if disease and/or being aware of the proximity of the disease via monitoring systems will aid in the proper timing to maximize the effectiveness of the fungicide applications.</p> <p>On certain varieties, TOPAZ® Fungicide applications may cause crinkled, smaller and/or greener leaves. Yields of dry beans displaying these characteristics have not been reduced due to TOPAZ® Fungicide treatments.</p>
<p><b>Applications:</b> TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application. Addition of an oil-based additive is recommended for improved coverage and penetration when applying by air.</p> <p><b>Specific Use Restrictions:</b></p> <ol style="list-style-type: none"> <li>1) Do not apply more than 12 fl. oz./A/season of TOPAZ® Fungicide.</li> <li>2) Apply up to Stage R6.</li> <li>3) Do not apply more than 0.34 lb. a.i. propiconazole-containing product/A/season.</li> </ol>			

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Stone Fruits Apricots Cherries, Sweet Cherries, Tart Nectarines Peaches Plums Plumcot Prunes  And cultivars and/or hybrids of these.	Brown Rot Blossom Blight ( <i>Monilinia</i> spp.)	4	Apply TOPAZ® Fungicide at early bloom stage. If disease pressure is low, a second application may be made as needed through petal fall. Under conditions of high disease pressure and/or very susceptible varieties, make a second application from 75–100% bloom and a third application at petal fall.
	Fruit Brown Rot ( <i>Monilinia</i> spp.)	4	Apply as needed a maximum of 2 sprays during the preharvest period up to the day of harvest (0 day PHI). If high inoculum and severe disease conditions persist, apply another registered fungicide after the 2 TOPAZ® Fungicide applications.
	Powdery Mildew ( <i>Podosphaera</i> spp.) Cherry Leaf Spot ( <i>Blumeriella jaapii</i> ) Rust ( <i>Tranzschelia discolor</i> )	4	Follow the Brown Rot Blossom Blight schedule. Make up to 2 additional applications on a 10- to 14-day interval from the end of petal fall to harvest.

**Applications:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. Stone fruit diseases are most effectively controlled by ground applications. TOPAZ® Fungicide may be applied by ground or air (a minimum of 15 gals./A).

**Precaution:** Applications of TOPAZ® Fungicide during bloom to Stanley plums have occasionally caused fruit to be less oval in shape and smaller in size at harvest. To avoid this, do not apply TOPAZ® Fungicide to Stanley plums earlier than 21 days prior to harvest.

**Specific Use Restrictions:**

- 1) Do not apply more than 20 fl. oz./A/season of TOPAZ® Fungicide.
- 2) TOPAZ® Fungicide may be applied at 0 day PHI (day of harvest).
- 3) Do not apply more than 0.56 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Strawberries	Anthraco­nose ( <i>Colletotrichum acutatum</i> ) Leaf Spot ( <i>Cercospora fragariae</i> ) Powdery Mildew ( <i>Sphaerotheca macularis</i> ) Leaf Rust ( <i>Phragmidium potentillae</i> )	4	Begin applications when disease levels are no more than 5%. Apply 4 fl. oz./A of TOPAZ® Fungicide up to 4 times on a 7-day interval. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action.

**Applications:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground (a minimum of 20 gals./A) or aerial application (a minimum of 15 gals./A).

**Specific Use Restrictions:**

- 1) Do not apply more than 16 fl. oz./A/season of TOPAZ® Fungicide.
- 2) TOPAZ® Fungicide may be applied at 0 day PHI (day of harvest).
- 3) Do not apply more than 0.45 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Sugar Beets	Leaf Spot ( <i>Cercospora beticola</i> ) Powdery Mildew ( <i>Erysiphe polygoni</i> )	4	Begin applications at first sign of disease. Repeat on a 10- to 14-day interval. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action.  If disease levels continue to increase, immediately switch to a fungicide with a different mode of action.

**Applications:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground, air or chemigation.

**Specific Use Restrictions:**

- 1) Do not apply more than 12 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 21 days of harvest.
- 3) Do not apply more than 0.34 lb. a.i. propiconazole-containing product/A/season.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Sugarcane	Pineapple disease ( <i>Ceratocystic paradoxa</i> )	0.75 fl. oz./ 100 gals. of water (1:17,000)	Apply TOPAZ® Fungicide to cut seed pieces using one of the following methods: <b>Cold Water Dip:</b> Immerse seed pieces to give thorough wetting, remove, and allow to drain. <b>Hot Water Dip:</b> Maintain water temperature at 125°F (52°C). Soak the seed pieces for 20–30 minutes, remove, and allow to drain. <b>Conveyer Belt Treatment:</b> Treat seed pieces with TOPAZ® Fungicide/water solution using inline directed spray sufficient to wet cut ends.

**Specific Use Restrictions:**

- 1) Dispose of used dip solution according to local, State, and Federal regulations.
- 2) Do not use treated seed pieces for food or feed.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Tree Nuts  Almond (see specific directions) Beechnut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (see specific directions) Hickory Macadamia Pecan (see specific directions) Walnut Pistachios (see specific directions)	Foliar Diseases	4-8	Apply TOPAZ® Fungicide at first sign of disease. Repeat on a 7- to 14-day interval.

**Applications:** TOPAZ® Fungicide is most effective when applied and allowed to dry before a rainfall. For best results, use sufficient water to provide thorough coverage. TOPAZ® Fungicide may be applied by either ground or aerial application (a minimum of 15 gals./A). For best control of tree nut diseases, ground applications are recommended.

**Specific Use Restrictions:**

- 1) Do not apply more than 32 fl. oz./A/season of TOPAZ® Fungicide.
- 2) Do not apply within 60 days of harvest except for pecans (see specific directions).
- 3) Do not apply more than 0.90 lb. a.i. propiconazole-containing product/A/season.
- 4) Do not graze livestock in treated areas or cut treated cover crop for feed.

CROP	TARGET DISEASES	USE RATE FL. OZ. PRODUCT/A	REMARKS
Pineapple	Ceratocytis Butt Rot ( <i>C. paradoxa</i> )	3 - 4 fl. oz.	Apply 3 to 4 ounces in 100 gallons of water or wax water emulsion after harvest. For thorough coverage, dip or spray fruit and allow to drain. Limit dripping time to no more than 3 minutes. Dip solution should be replaced with fresh dip solution after 200,000 lbs of fruit have been treated.  Fruit discarded from fresh fruit packing operations may be used for processing. Cannery wastes may be fed to livestock.

**Specific Use Restrictions:**

- 1) Do not apply more than 4 fl. oz. as a post harvest treatment.

FL. OZ. OF TOPAZ® Fungicide/ACRE	LB. A.I./ACRE	ACRES TREATED PER 1 GALLON TOPAZ® Fungicide
2	0.056	64
4	0.1125	32
6	0.169	21.3
8	0.225	16
10	0.28	12.8
12	0.34	10.7
16	0.45	8
20	0.56	6.4
24	0.67	5.3
30	0.84	4.3
32	0.90	4

## TURF AND ORNAMENTAL USES

### PRODUCT INFORMATION

TOPAZ® Fungicide is a systemic fungicide for use on turfgrasses for the control of dollar spot (*Sclerotinia homoeocarpa*), brown patch (*Rhizoctonia solani*), anthracnose (*Colletotrichum graminicola*), red thread (*Laetisaria fuciformis*), pink patch (*Limonomyces roseipellis*), rust (*Puccinia graminis*), powdery mildew (*Erysiphe graminis*), stripe smut (*Ustilago striiformis* and *Urocystis agropyri*), summer patch (*Magnaporthe poae*), necrotic ring spot (*Leptosphaeria korrae*), spring dead spot (*Leptosphaeria korrae*, *Leptosphaeria narmari*, *Ophiosphaerella herpotricha*, *Gaeumannomyces graminis*), take-all patch (*Gaeumannomyces graminis*), leaf spot (*Bipolaris* spp., *Drechslera* spp.), gray leaf spot (*Pyricularia grisea*), pink snowmold (*Microdochium nivale*), Fusarium patch (*Fusarium nivale*), gray snowmold (*Typhula* spp.), yellow patch (*Rhizoctonia cerealis*), and zoysia patch (*Rhizoctonia solani*).

TOPAZ® Fungicide also controls numerous diseases on ornamentals and other landscape and nursery plantings. It controls powdery mildews, rusts, leaf spots, scabs, and blights. Refer to the appropriate section for specified diseases and plants.

For turf and ornamental uses, do not apply the product through any type of irrigation system. Do not use TOPAZ® Fungicide in greenhouses or as a tree injection. Do not apply more than 5.8 fl. oz./1,000 sq. ft./calendar year of TOPAZ® Fungicide.

### MIXING INSTRUCTIONS

Fill the spray tank ½ - ¾ full with water. Add the proper amount of TOPAZ® Fungicide and then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

If TOPAZ® FUNGICIDE is tank mixed with other products, use the following sequence:

1. Always check the compatibility of the tank mix using a jar test with proportionate amounts of TOPAZ® Fungicide, other chemicals to be used, and the water, before mixing in the spray tank.
2. Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
3. Fill tank at least ½ full of clean water.
4. Add wettable powders to the tank first, allowing them to completely suspend in the tank before proceeding. This process can be hastened by premixing the product in water before adding to the tank.
5. Add flowables or suspensions next.
6. Add TOPAZ® Fungicide next.
7. Add emulsifiable concentrates last.
8. Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply them the same day.

### Tank Mixes

For broader spectrum control, TOPAZ® Fungicide can be tank mixed with other fungicides. For example, Subdue MAXX® may be tank mixed with TOPAZ® Fungicide or used alone when conditions are favorable for Pythium blight. TOPAZ® Fungicide is also compatible with numerous herbicides and insecticides. Check compatibility before tank mixing. Add Unite® (3 pts./100 gals.) to tank mixes which are incompatible. Follow the directions under Mixing Instructions for tank mixes. Observe all directions, precautions, and limitations on labeling of all products used in tank mixes. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

## TURFGRASS AND DICHONDRA DISEASE CONTROL

1. USE TOPAZ® FUNGICIDE IN A PREVENTATIVE DISEASE CONTROL PROGRAM.
2. Apply in sufficient water to ensure thorough coverage.
3. Apply after mowing OR allow sprayed area to completely dry before mowing.
4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.
5. For control of soil-borne diseases, TOPAZ® Fungicide can be watered in after application.
6. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.
7. For optimum turf quality and disease control, use TOPAZ® Fungicide in conjunction with turf management practices that promote good plant health and optimum disease control.
8. Evaluate spray additives prior to use. Label directions are based on data obtained with no additives.
9. Before use of any fungicide, proper diagnosis of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease organism is essential to determine the best control measures.
10. Do not apply more than 5.8 fl. oz./1,000 sq. ft./calendar year.
11. Do not apply more than 1.79 lb. propiconazole a.i./A/application.

**IMPORTANT:** Bermudagrass can be sensitive to TOPAZ® Fungicide. Do not exceed 1.44 fl. oz./1,000 sq. ft. every 30 days on any variety of bermudagrass. In FL, do not apply TOPAZ® Fungicide to bermudagrass golf course greens when temperatures exceed 90°F.

**NOTE:** Do not graze animals on treated areas. Do not feed clippings from treated areas to livestock or poultry.

### Turfgrass - Specific Diseases, Rates, and Application Timing

DISEASE	FL. OZ. PER 1,000 SQ. FT.	FL. OZ. PER ACRE	APPLICATION INTERVAL/TIMING	INSTRUCTIONS
Dollar Spot <i>(Sclerotinia homoeocarpa)</i>	0.18	8.0	7 days	Apply when conditions are favorable for disease development.
	0.18	8.0	14 days	Tank mix with low label rate of a chlorothalonil that is EPA-registered for use on turfgrass.
	0.37	16	21-28 days	
	0.34-0.73	16-32	14-28 days	If using the 0.35-0.75 fl. oz./1,000 sq. ft. rate without tank mixing, making no more than 3 consecutive applications for dollar spot control before rotating to an alternate EPA-registered fungicide having a different mode of action.
Anthracnose <i>(Colletotrichum graminicola)</i>	0.37-0.73	16-32	14-28 days	Apply when conditions are favorable for disease development. When disease pressure is high, use higher rates of TOPAZ® Fungicide and shorter intervals. For broad spectrum control, tank mix with a registered contact fungicide at the label rate.  If disease is present, mix 0.75 fl. oz. of TOPAZ® Fungicide per 1,000 sq. ft. with the label rate of the above mentioned contact fungicides.
Brown Patch <i>(Rhizoctonia solani)</i>	0.37-0.73	16-32	14-21 days	Begin applications in May or June before disease is present. Tank mix with a registered contact fungicide labeled for brown patch control at the label rate.  Under conditions of high temperatures and high humidity, use the higher rates of TOPAZ® Fungicide and shorter intervals.
Powdery Mildew <i>(Erysiphe graminis)</i> Rust <i>(Puccinia graminis)</i>	0.37-0.73	16-32	14-28 days	Apply when conditions are favorable for disease development. If disease is present, use 0.75 fl. oz. of TOPAZ® Fungicide per 1,000 sq. ft.
Red Thread <i>(Laetisaria fuciformis)</i> Pink Patch <i>(Limonomyces roseipellis)</i>	0.37	32	14-21 days	Apply when conditions are favorable for disease development.
Stripe Smut <i>(Ustilago striiformis)</i> <i>(Urocystis agropyri)</i>	0.37-0.73	16-32	Fall or Spring	Apply one in the fall after grass becomes dormant or in the early spring before grass starts to grow.
Gray Leaf Spot <i>(Pyricularia grisea)</i>	0.37-0.73	16-32	14 days	Apply when conditions are favorable for disease development. If using the 0.35 fl. oz./1,000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.

*(continued)*

DISEASE	FL. OZ. PER 1,000 SQ. FT.	FL. OZ. PER ACRE	APPLICATION INTERVAL/TIMING	INSTRUCTIONS
Melting Out Leaf Spot ( <i>Bipolaris</i> spp.) ( <i>Drechslera</i> spp.)	0.37-0.73	16-63	14 days	Under light to moderate pressure, apply TOPAZ® Fungicide to reduce the severity of leaf spot and melting. For broad spectrum disease control, tank mix the 0.35 fl. oz. Tile with a registered contact fungicide at the label rate.  Tank mix the 0.35-0.75 fl. oz./1,000 sq. ft. TOPAZ® Fungicide rate with a registered contact fungicide at the label rate.
Summer Patch Poa Patch ( <i>Magnaporthe poae</i> )	0.73 1.45	32 63	14 days 28 days	Apply TOPAZ® Fungicide beginning in April. Use the 1.5 fl.oz./1,000 sq. ft. rate on a 28-day schedule and the 0.75 fl. oz./1,000 sq. ft. rate on a 14-day schedule.
Take-All Patch ( <i>Gaeumannomyces graminis</i> )	0.73-1.45	32-63	Spring and Fall	Apply TOPAZ® Fungicide to reduce the severity of take-all patch. Make 0.35-0.75 fall applications in September and October or when night temperatures drop to 55°F, and 0.35-0.75 spring applications in April and May, depending on local recommendations.
Spring Dead Spot ( <i>Leptosphaeria korrae</i> , <i>Leptosphaeria narmari</i> , <i>Ophiosphaerella herpotricha</i> , <i>Gaeumannomyces graminis</i> )	1.45	63	30 days	Make 1-3 applications. For once application, apply in September or October. For multiple applications, begin sprays in August.
Necrotic Ring Spot ( <i>Leptosphaeria korrae</i> )	1.45	63	Fall or Spring	Apply in the fall and/or the early spring depending on local recommendations.
Snowmold Gray ( <i>Typhula</i> spp.) Pink ( <i>Microdochium nivale</i> )	0.73-1.45	32-63	Late Fall	Apply one application in the late fall before snow cover. Do not apply on top of snow. For optimum disease control, the 0.75 and 1.1 fl. oz. TOPAZ® Fungicide rates should be tank mixed with either PCNB or chlorothalonil at label rates.
Fusarium patch ( <i>Fusarium nivale</i> )	0.73-1.45	32-63	Fall-Early Spring	Apply when conditions are favorable for disease development.
Yellow patch ( <i>Rhizoctonia cerealis</i> )	1.10-1.45	48-63	Late Fall	Apply one application in the late fall before snow cover. Do not apply on top of snow. If using a 1.1 fl. oz./1,000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.
Zoysia patch, Large patch of zoysia ( <i>Rhizoctonia solani</i> )	1.10-1.45	48-63	Early Fall	Make one application in the early fall (mid-September to mid-October) prior to development of disease symptoms. Consult local turfgrass extension experts to determine the optimum application timing for your area.

### Dichondra - Specific Diseases, Rates, and Application Timing

DISEASE	FL. OZ. PER 1,000 SQ. FT.	FL. OZ. PER ACRE	APPLICATION INTERVAL/TIMING	INSTRUCTIONS
Dichondra Rust ( <i>Puccinia dichondrae</i> )	0.73	32	14-21 days	Apply when conditions are favorable for disease development.

### Establishment of Cool Season Turfgrass

TOPAZ® Fungicide provides control of many diseases of turf, and its primary use is as a fungicide for use against the diseases listed on this label. As an additional benefit, TOPAZ® Fungicide will improve the rate of establishment when it is applied to cool season grass seedlings or sod.

**New Seedlings:** Apply 0.35 fl. oz./1,000 sq. ft. at the 2 to 3-leaf stage of growth for faster root development and top growth.

**Sod:** Apply 0.35 fl. oz./1,000 sq. ft. 2-6 weeks before cutting for increased sod knitting and faster establishment after laying.

## Disease Control in Nurseries (Field) and Landscape Plantings)

1. USE TOPAZ® Fungicide IN A PREVENTATIVE DISEASE CONTROL PROGRAM. To determine the use directions for controlling a disease on an ornamental plant species, select the plant species in Table 1. The number in parenthesis following the plant species refers you to the disease(s) controlled in Table 2. Find the disease in Table 2. The letter in brackets following the disease refers you to the application regime in Table 3.
2. Allow spray to dry before overhead irrigation is applied.
3. Optimum benefit of TOPAZ® Fungicide is obtained when used in conjunction with sound disease management practices.

## PRODUCT INSTRUCTIONS

TOPAZ® Fungicide may be used at rates of 0.75-8.7 fl. oz./100 gals. water for control of diseases of ornamental plant species (see Tables 1, 2, and 3).

**NOTE:** For outdoor uses, you can apply up to 2.0 gallons of TOPAZ® FUNGICIDE/acre/crop/calendar year.

For general disease control in landscapes, apply 2.2-3.0 fl. oz./100 gals. water every 21 days. For best control, begin TOPAZ® Fungicide applications before disease development.

**Note:** Plant tolerances to TOPAZ® Fungicide have been found acceptable for the specific genera and species of plants listed under the Directions for Use. Other plant species may be sensitive to TOPAZ® Fungicide and diseases other than those listed may not be controlled. Before using TOPAZ® Fungicide on plants or for diseases that are not listed in the Directions for Use, test TOPAZ® Fungicide on a small scale basis first. Do not apply TOPAZ® Fungicide to African violets, begonias, Boston fern, or geraniums. Apply the recommended rates for a particular type of disease, i.e., rust, powdery mildew, etc., and evaluate for phytotoxicity and disease control prior to widespread use.

**Table 1. Ornamentals - Plant Species**  
**Numbers in parentheses refer to diseases controlled. See Table 2.**

HERBACEOUS ORNAMENTAL	WOODY ORNAMENTAL	NON-BEARING FRUITS AND NUTS (NURSERIES AND LANDSCAPE PLANTINGS)
Calendula (4a)	Amelanchier (4d)	Apple (3q, 4d, 5a)
Carnation (5f)	Ash (4c)	Bartlett pear (3q, 4c, 5a)
Chrysanthemum (2a)	Azalea (2c, 4b)	Cherry (2b, 3d)
Delphinium (4a)	Bayberry (3n)	Citrus (3m)
English Ivy (3e)	Camellia (3e)	Nectarine (2b)
Gomphrena (3a)	Cotoneaster (3i)	Peach (2b)
Impatiens (3a, 3b, 4a)	Crabapple (3c, 3q, 4c, 5a)	Pecan (3b, 3c, 3f, 3i, 3n, 4e)
Iris (5d)	Crape Myrtle (4a)	Plum (2b)
Marigold (3a)	Dogwood (3h, 4c)	Walnut (3j)
Monarda (4c)	Douglas Fir (5b)	
Phlox (4c)	Elm (4c)	
Snapdragon (5d)	Euonymus (3e, 4c)	
Sweet William (3k)	Hawthorn (5a)	
( <i>Dianthus barbatus</i> )	Holly (3r)	
Zinnia (4c)	Juniper (1a)	
	Lilac (4c)	
	Linden (3e, 3b, 4b)	
	Magnolia (3c, 4b)	
	Maple (3e, 4f)	
	Oaks (3p)	
	Pines (1b, 1c)	
	Poplars (5b)	
	Pyracantha (3o)	
	Red Tip Photinia (3i)	
	Rhaphiolepis (3e, 3i)	
	Rhododendron (2c, 3n)	
	Roses (3g, 4e, 5c)	
	(Outdoor Use Only)	
	Shasta Fir (5e)	
	Sweetgum (3b, 3c, 3n)	
	Sycamore (3e)	
	Tulip Tree (3e, 4a)	
	Wax Myrtle (3n)	



## Table 2. Diseases

Letters in brackets refer to application regimes. See Table 3.

### 1. Conifer Blights

- a. *Phomopsis juniperovora* (Phomopsis Blight) [B]
- b. *Sirococcus strobilinus* (Tip Blight) [D]
- c. *Sphaeropsis sapinea* (Diplodia Tip Blight) [B]

### 2. Flower Blight

- a. *Ascochyta chrysanthemi* (Ray Blight) [C]
- b. *Monilinia* spp. [A]
- c. *Ovulinia* spp. [B]

### 3. Leaf Blights/Spots

- a. *Alternaria* spp. [B]
- b. *Cercospora* spp. (Brown Leaf Spot) [C]
- c. *Cladosporium* spp. (Scab) [C]
- d. *Coccomyces hiemalis* [A]
- e. *Collectrichum* spp. [B]
- f. *Cristulariella* spp. (Zonate leaf spot) [C]
- g. *Diplocarpon rosae* (Blackspot) [B]
- h. *Discula* spp. (Anthracnose) [A]
- i. *Fabraea maculata* (syn. *Entomosporium maculata*) [B]
- j. *Gnomia leptostyla* (Anthracnose) [C]
- k. *Heterosporium echinulatum* [B]
- l. *Mycosphaerella caryigena* (Downy Spot) [C]
- m. *Mycosphaerella fructicola* (Greasy Spot) [E]
- n. *Septoria* spp. (Leaf Scorch) [C]
- o. *Spilocaea pyracanthae* [B]
- p. *Tubakia dryina* [D]
- q. *Venturia inaequalis* (Scab) [A]
- r. *Rhizoctonia* web blight [B]

### 4. Powdery Mildew

- a. *Erysiphe* spp. [B]
- b. *Microsphaera* spp. [C]
- c. *Oidium* spp. [B]
- d. *Podosphaera* spp. [B]
- e. *Sphaerotheca pannosa* [B]
- f. *Phyllactinia* spp. [B]

### 5. Rust

- a. *Gymnosporangium juniperi-virginianae* [A]
- b. *Melampsora occidentalis* [D]
- c. *Phragmidium* spp. [B]
- d. *Puccinia* spp. [B]
- e. *Pucciniastrum goeppertianum* [D]
- f. *Uromyces dianthi* [B]

## Table 3. Application Regimes

1. Mix 0.75-1.5 fl. oz. of TOPAZ® Fungicide in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 14-21 days during the period of primary infection. If disease is present, tank mix with an EPA-registered contact fungicide. For flower blight, apply TOPAZ® Fungicide when there is 5-10% bloom and again at 70-100% bloom. For dogwoods, apply the 0.75-1.5 fl. oz. rate every 14 days, or apply 3 fl. oz. of TOPAZ® Fungicide every 28 days.
2. Mix 1.8-3.0 fl. oz. of TOPAZ® Fungicide in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply as needed, beginning when conditions are favorable for disease development. For blackspot, apply with a registered contact fungicide labeled for blackspot. For Calendula, apply every 30 days. For diplodia tip blight, make 3 applications every 14 days prior to major period of infection. For juniper phomopsis blight, make first application as soon as junipers start to grow, and repeat the applications every 14-21 days during periods of active growth.
3. Mix 3-4.5 fl. oz. of TOPAZ® Fungicide in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 30 days, beginning when conditions are favorable for disease development. For pecans, apply the 12 fl. oz. rate beginning at bud break. Apply 3 times on 14-day intervals. For walnuts, apply 3 fl. oz. at 14-21 day intervals. For ray blight, apply 4.5 fl. oz. at 7-day intervals or 7.5 fl. oz. at 14-day intervals. For impatiens, bayberry, linden, magnolia, sweetgum and wax myrtle, the maximum use rate is 8 fl. oz.

4. Mix 6 fl. oz. of TOPAZ® Fungicide in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 14-28 days, beginning when conditions are favorable for disease development. For Douglas fir needle rust, apply once in May. For tip blight, initial application is in mid-late winter, and apply 3 times at 2-month intervals.
5. Mix 7.5-8.7 fl. oz. of TOPAZ® Fungicide in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply during June to August time period.

**Note:** To avoid possible illegal residues, do not apply to apple, Bartlett pear, cherry, citrus, nectarine, peach, pecan, plum, or walnut trees that will bear harvestable fruit within 12 months.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in the original container in a cool place.

**PESTICIDE DISPOSAL:** Pesticide wastes may be toxic. 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 of the nearest EPA Regional Office for guidance.

### CONTAINER DISPOSAL:

**Plastic Containers:** Triple rinse: Clean the container as described in "Container Rinsing Instructions" below.

**For Bulk and Mini-Bulk Containers:** Clean the container as described in "Container Rinsing Instructions" below.

**Container Rinsing Instructions:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**CONTAINER PRECAUTIONS:** Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.

### Refill Only With TOPAZ® Fungicide.

The contents of this container cannot be completely removed by cleaning. Refilling with materials other than TOPAZ® Fungicide will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.**

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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, presence of other materials or other influencing factors in the use of the product, which are beyond the control of WINFIELD SOLUTIONS, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold WINFIELD SOLUTIONS, LLC and Seller harmless for any claims relating to such factors.

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## NOTES

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