# PROPICONAZOLE 14.3



# **Fungicide**

Broad spectrum and systemic disease control for turf and ornamentals and a systemic fungicide for control of selected diseases in trees

### ACTIVE INGREDIENT: % BY WT.

Propiconazole: 1-[[2-(2,4-dichlorophenyl)

-4-propyl-1,3-dioxolan-2-yl]

 Methyl]-1H-1,2,4-triazole
 14.3%

 OTHER INGREDIENTS:
 85.7%

 TOTAL:
 100.0%

Quali-Pro Propiconazole 14.3 is an emulsifiable concentrate containing 1.3 lbs. of active ingredient per gallon.

# 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.)

EPA Reg. No. 53883-363 EPA Est No. 53883-TX-002

# **NET CONTENTS:** 1 GALLON





Manufactured by:

Control
Solutions Inc.
5903 Genoa-Red Bluff, Pasadena, TX 7750
A member of Adama

Consumer and Professional Solutions

13370 EPA 082223

	FIRST AID
IF	Call a poison control center or doctor immediately for treatment advice.
SWALLOWED:	Have person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything by mouth to an unconscious person.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 to 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	Take off contaminated clothing.
OR CLOTHING:	Rinse skin immediately with plenty of water for 15 to 20 minutes.
	Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible.</li> </ul>
	Call a poison control center or doctor for further treatment advice

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact SafetyCall® International for emergency medical treatment at (866) 897-8050. NOTE TO PHYSICIAN: There is no specific antidote for this product. Induce emesis or lavage stomach, taking care to avoid aspiration of stomach contents into lungs.

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves including barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton
- · Shoes plus socks

#### **USER SAFETY REQUIREMENTS**

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

#### **ENGINEERING CONTROLS STATEMENT**

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

#### USER SAFETY RECOMMENDATIONS

#### Users should:

- · Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of the gloves before removing. As soon
  as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

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

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near or use with oxidizing agents.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers can 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 including plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves including barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton
- · Shoes plus socks

#### NON-AGRICULTURAL 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, forests, nurseries, or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

## FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

#### PRODUCT INFORMATION

Quali-Pro Propiconazole 14.3 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), leafspot (Bipolaris spp., prechslera spp.), gray leafspot (Pyricularia grisea), pink snowmold (Microdochium nivale), Fusarium patch (Fusarium nivale), gray snowmold (Typhula spp.), yellow patch (Rhizoctonia cerealis), and zoysia patch (Rhizoctonia solani).

Quali-Pro Propiconazole 14.3 also controls numerous diseases on ornamentals and other landscape and nursery plantings. It controls powdery mildews, rusts, leafspots, scabs, and blights. Refer to the appropriate section for specified diseases and plants.

#### RESTRICTIONS:

- DO NOT apply more than 5.4 gallons per acre (16 fl. oz. per 1000 sq. ft.) of Quali-Pro Propiconazole per calendar year.
- Maximum application rate is 1.79 lbs. propiconazole per acre and maximum yearly application rate is 7.2 lbs. propiconazole per acre per calendar year.
- Bermudagrass can be sensitive to Quali-Pro Propiconazole. DO NOT exceed 4 fl. Oz. per 1000 sq. ft. every 30 days on any variety of bermudagrass. In Florida, DO NOT apply Quali-Pro Propiconazole to bermudagrass golf course greens when temperature exceed 90°F.
- . DO NOT graze animals on treated areas.
- DO NOT feed clippings from treated areas to livestock or poultry.
- . DO NOT apply this product through any type of irrigation system.

#### RESISTANCE MANAGEMENT

For resistance management, Quali-Pro Propiconazole contains a Group 3 fungicide. Any fungal population may contain individuals naturally resistant to Quali-Pro Propiconazole and other Group 3 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Follow appropriate resistance-management strategies.

To delay fungicide/bactericide resistance, take one or more of the following steps:

- Rotate the use of Quali-Pro Propiconazole or other Group 3 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use
  is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical
  information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of
  environmental conditions on disease development, disease thresholds, as well as cultural, biological and other
  chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications.
   Note that using predictive models alone is not sufficient to manage resistance.
- · Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistancemanagement and/or IPM directions for specific crops and pathodens.
- For further information or to report suspected resistance contact your local Control Solutions, Inc. representative.
   You can also contact your pesticide distributor or university extension specialist to report resistance.

#### MIXING INSTRUCTIONS

Fill the spray tank 1/2 to 3/4 full with water. Add the proper amount of Quali-Pro Propiconazole 14.3 and then add the remainder of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

If Quali-Pro Propiconazole 14.3 is tank mixed with other products, use the following sequence:

- Always check the compatibility of the tank mix using a jar test with proportionate amounts of Quali-Pro Propiconazole 14.3, 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 1/2 full with clean water.
- Add wettable powders to the tank first, allowing them to completely suspend in the tank before proceeding. Premixing the product in water before adding to the tank will hasten the process.
- Add flowables or suspensions next.
- Add Quali-Pro Propiconazole 14.3 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, Quali-Pro Propiconazole 14.3 can be tank mixed with other fungicides. Quali-Pro Propiconazole 14.3 is also compatible with numerous herbicides and insecticides. Check compatibility before tank mixing. Add Unite® (3 pts. per 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.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in take mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity) and method of application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### Wind Speed

DO NOT apply at wind speeds greater than 15 mph.

#### Droplet Size

Apply as a medium or coarser spray (ASAE Standard 572).

#### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. **DO NOT** make applications into areas of temperature inversions or stable atmospheric conditions.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of propiconazole. Where states have more stringent regulations, they must be observed.

#### Equipment

All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

#### TURFGRASS AND DICHONDRA DISEASE CONTROL

- 1. Use Quali-Pro Propiconazole in a preventive 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, Quali-Pro Propiconazole can be watered in after application.
- 6. Under conditions optimum for high disease pressure, use the higher rate and the shorter application interval.
- For optimum turf quality and disease control, use Quali-Pro Propiconazole 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.
- 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.

#### RESTRICTIONS:

- DO NOT graze animals on treated areas.
- DO NOT feed clippings from treated areas to livestock or poultry.
- Maximum Single Application Rate: 1.79 lbs. ai/A (1.4 gal./A of Bumper 14.3 EC or 4 fl. oz/1,000 sq. ft)
- Maximum Annual Rate: 7.2 lbs. ai/A/year (5.5 gal./A of Bumper 14.3 EC or 16 fl. oz./1,000 sq. ft./year)
- Maximum Number of Applications per Year: 4 at the highest rate of 1.79 lb. ai/A (1.4 gal./A of Bumper 14.3 EC or 4 fl. oz/1,000 sq. ft)
- . Minimum Retreatment Interval: 14 days
- DO NOT exceed 4 fl. oz./1,000 sq. ft. every 30 days on any variety of bermudagrass. In FL, DO NOT apply Bumper 14.3 EC to bermudagrass golf course greens when temperatures exceed 90°F.

TURFGRASS—SPECIFIC DISEASES, RATES, AND APPLICATION TIMING				
Disease	Fl. Oz. Per 1000 Sq. Ft. (lbs. A.I./1000 Sq. Ft.)	FI. Oz. Per Acre (lbs. A.I./Acre)	Application Interval/ Timing	Application Instructions
Dollar Spot (Sclerotinia homoeocarpa)	0.5 (0.005)	22 (0.22)	14 days	Tank mix with low label rate of one of the following funglicides: Daconil® Weatherstick(EPA#505342-209-100;A.I. Chlorothalonil)(or Quali-Pro Chlorothalonil 720 SFT;EPA# 53883-310; A.I. Chlorothalonil) Daconil Ultrex(EPA#50534-202-100; A.I. Chlorothalonil) or Quali-Pro Chlorothalonil DF; EPA# 53883-313; A.I. Chlorothalonil)

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TURFGRASS—SPECIFIC DISEASES, RATES, AND APPLICATION TIMING				
Disease	Fl. Oz. Per 1000 Sq. Ft. (lbs. A.I./1000 Sq. Ft.)	Fl. Oz. Per Acre (lbs. A.I./Acre)	Application Interval/ Timing	Application Instructions
Dollar Spot (Sclerotinia homoeocarpa)	1 (0.01)	44 (0.44)	21-28 days	Tank mix with low label rate of one of the following fungicides: Daconil Weatherstick (EPA#505342-209-100;A.I. Chlorothalonil) (or Quali-Pro Chlorothalonil 720 SFT;EPA#53883-310; A.I. Chlorothalonil) Daconil Ultrex (EPA#50534-202-100; A.I. Chlorothalonil) (or Quali-Pro Chlorothalonil DF; EPA# 53883-313; A.I. Chlorothalonil DF; EPA#53883-313; A.I. Chlorothalonil ) Iprodione 2SE(EPA#89442-13; A.I. Iprodione) or Quali-Pro Ipro 2SE(EPA#53883-380;A.I. Iprodione)
	1-2 (0.01-0.02)	44-88 (0.44-0.89)	14-28 days	If using the 1-2 fl. oz. per 1000 sq. ft. rate without tank mixing, make no more than 3 consecutive applications for dollar spot control before rotating to an alternate EPA-registered fungicide having a different mode of
Anthracnose (Colletotrichum graminicola)	1-2 (0.01-0.02)	44-88 (0.44-0.89)	14-28 days	Apply when conditions are favorable for disease development. Use higher rates of Quali-Pro Propiconazole 14.3 and shorter application intervals when disease pressure is high. For broad spectrum control, tank mix with a registered contact fungicide at the label rate.
				If disease is present, mix 2 fl. oz. of Quali-Pro Propiconazole 14.3 per 1000 sq. ft. with the label rate of the above mentioned contact fungicides.
Brown Patch (Rhizoctonia solani)	1-2 (0.01-0.02)	44-88 (0.44-0.89)	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 Quali-Pro Propiconazole 14.3 and shorter application intervals.
Powdery Mildew (Erysiphe graminis) Rust (Puccinia graminis)	1-2 (0.01-0.02)	44-88 (0.44-0.89)	14-28 days	Apply when conditions are favorable for disease development. If disease is present, use 2 fl. oz. of Quali-Pro Propiconazole 14.3 per 1000 sq. ft.

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TURFGRASS—SPECIFIC DISEASES, RATES, AND APPLICATION TIMING				
Disease	Fl. Oz. Per 1000 Sq. Ft. (lbs. A.I./1000 Sq. Ft.)	Fl. Oz. Per Acre (lbs. A.I./Acre)	Application Interval/ Timing	Application Instructions
Red Thread (Laetisaria fuciformis) Pink Patch (Limonomyces roseipellis)	2 (0.02)	88 (0.89)	14-21 days	Apply when conditions are favorable for disease development.
Stripe Smut (Ustilago striiformis) (Urocystis agropyri)	1-2 (0.01-0.02)	44-88 (0.44-0.89)	Fall or Spring	Apply once in the fall after grass becomes dormant or in the early spring before grass starts to grow.
Gray Leafspot (Pyricylaria grisea)	1-2 (0.01-0.02)	44-88 (0.44-0.89)	14 days	Apply when conditions are favorable for disease development. If using the 1 fl. oz. per 1000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.
Melting out, Leaf Spot (Bipolaris spp.) (Drechslera spp.)	1-2 (0.01-0.02)	44-176 (0.44-1.79)	14 days	Under light to moderate pressure, apply Quali-Pro Propiconazole 14.3 to reduce the severity of leaf spot and melting out caused by Helminthosporium-type pathogens. For broad spectrum disease control, tank mix the 1 fl. oz. Quali-Pro Propiconazole 14.3 rate with a registered contact fungicide at the label rate  Tank mix the 1-2 fl. oz. per 1000 sq. ft. Quali-Pro Propiconazole 14.3 rate with a registered contact fungicide at the
Summer Patch, Poa Patch (Magnaporthe poae)	2 4 (0.02) (0.04)	88 176 (0.89) (1.79)	14 days 28 days	label rate.  Apply Quali-Pro Propiconazole 14.3 beginning in April. Use the 4 fl. oz. per 1000 sq. ft. rate on a 28-day schedule and the 2 fl. oz. per 1000 sq. ft. rate on a 14-day schedule.
Take-All Patch (Gaeumannomyces graminis)	2-4 (0.02-0.04)	88-176 (0.89-1.79)	Spring and Fall	Apply Quali-Pro Propiconazole 14.3 to reduce the severity of take-all patch. Make 1 to 2 fall applications in September and October or when night temperatures drop to 55°F, and 1 to 2 spring applications in April and May depending on local specifications.
Spring Dead Spot (Leptosphaeria korrae, Leptosphaeria narmari, Ophiosphaerella herpotricha, Gaeumannomyces graminis)	4 (0.04)	176 (1.79)	30 days	Make 1 to 3 applications. For one application, apply in September or October. For multiple applications, begin sprays in August.

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TURFGRASS-SPECIFIC DISEASES, RATES, AND APPLICATION TIMING				
Disease	Fl. Oz. Per 1000 Sq. Ft. (lbs. A.I./1000 Sq. Ft.)	Fl. Oz. Per Acre (lbs. A.I./Acre)	Application Interval/ Timing	Application Instructions
Necrotic Ring Spot (Leptosphaeria korrae)	4 (0.04)	176 (1.79)	Fall or Spring	Apply in the fall and/or the early spring depending on local specifications.
Gray Snowmold (Typhula spp.) Pink Snowmold (Microdochium nivale)	2-4 (0.02-0.04)	88-176 (0.89-1.79)	Late Fall	Apply one application in the late fall before snow cover. <b>DO NOT</b> apply on top of snow. If using rates of 2 and 3 fl. oz., tank mix Quali-Pro Propiconazole 14.3 with either PCNB or chlorothalonil at label rates to provide optimum disease control.
Fusarium Patch (Fusarium nivale)	2-4 (0.02-0.04)	88-176 (0.89-1.79)	Fall-Early Spring	Apply when conditions are favorable for disease development.
Yellow Patch (Rhizoctonia cerealis)	3-4 (0.03-0.04)	130-176 (1.32-1.79)	Late Fall	Apply one application in the late fall before snow cover. <b>DO NOT</b> apply on top of snow. If using a 3 fl. oz. per 1000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.
Zoysia Patch, large patch of zoysia (Rhizoctonia solani)	3-4 (0.03-0.04)	130-176 (1.32-1.79)	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 DISEASE, RATES, AND APPLICATION TIMING				
Disease	Fl. Oz. Per 1000 Sq. Ft. (lbs. A.I./1000 Sq. Ft.)	FI. Oz. Per Acre (lbs. A.I./Acre)	Application Interval/ Timing	Application Instructions
Dichondra Rust (Puccinia dichondrae)	2 (0.02)	88 (0.89)	14-21 days	Apply when conditions are favorable for disease development.

#### ESTABLISHMENT OF COOL-SEASON TURFGRASS

Quali-Pro Propiconazole 14.3 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, Quali-Pro Propiconazole 14.3 will improve the establishment rate when it is applied to cool-season grass seedlings or sod.

New Seedlings: Apply 1 fl. oz. per 1000 sq. ft.(.45 lb. ai/A) at the 2- to 3-leaf stage of growth for faster root development and top growth.

Sod: Apply 1 fl. oz. per 1000 sq. ft. (.45 lb. ai/A) 2 to 6 weeks before cutting for increased sod knitting and faster establishment after laying.

#### RESTRICTIONS:

- Maximum Single Application Rate: .45 lb. ai/A (.35 gal./A of Bumper 14.3 EC or 1 fl. oz/1,000 sq. ft)
- Maximum Annual Rate: 7.2 lbs. ai/A/year (5.4 gal./A of Bumper 14.3 EC) or 16 fl. oz/1,000 sq. ft).
- Maximum Number of Applications per Year: 15 at the highest rate of .45 lb. ai/A (.35 gal./A of Bumper 14.3 EC or 1 fl. oz/1,000 sq. ft)
- · Minimum Retreatment Interval: 14 days.

#### DISEASE CONTROL IN NURSERIES (FIELD) AND LANDSCAPE PLANTINGS

- 1. Use Quali-Pro Propiconazole 14.3 in a preventive 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 parentheses 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.
- Optimum benefit of Quali-Pro Propiconazole 14.3 is obtained when used in conjunction with sound disease management practices.

#### Application Instructions and Use Rates

Use BUMPER 14.3 EC at rates of 2-24 fl. oz. (0.02-0.24 lbs A.I.) per 100 gals. of water for control of diseases of ornamental plant species (see **Tables 1, 2**, and **3.**)

For outdoor uses, you can apply up to 5.4 gals. (7.03 lbs A.I.) of BUMPER 14.3 EC per acre per crop per calendar year. For disease control in landscapes, apply 6-8 fl. oz. (0.06-0.08 lbs A.I.) per 100 gals. of water every 21 days.

For best control, begin BUMPER 14.3 EC applications before disease development.

#### RESTRICTIONS:

- Maximum Single Application Rate: 1.79 lb. ai/A (1.4 gal./A of BUMPER 14.3 EC or 4 fl. oz/1.000 sg. ft)
- Maximum Annual Rate: 7.2 lbs. ai/A/year (5.4 gal./A of BUMPER 14.3 EC or 16 fl. oz./1.000 sg. ft./year)
- 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.
- Maximum Number of Applications per Year: 4 at the highest rate of 1.79 lb. ai/A (1.4 gal./A of BUMPER 14.3 EC or 4 fl. oz/1,000 sq. ft)
- · Minimum Retreatment Interval: 21 days.

Note On Plant Tolerance: Plant tolerances to Quali-Pro Propiconazole 14.3 have been found acceptable for the specific genera and species of plants listed under the DIRECTIONS FOR USE section of this label. Other plant species could be sensitive to Quali-Pro Propiconazole 14.3 and diseases other than those listed may not be controlled. Before using Quali-Pro Propiconazole 14.3 on ornamental plants, test Quali-Pro Propiconazole 14.3 on a small-scale basis first. DO NOT apply Quali-Pro Propiconazole 14.3 to African violets, begonias, Boston fern, or geraniums. Apply the specified 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 Ornamentals

Aiuga (6) Calendula (4a) Carnation (5f) Chrysanthemum (2a) Delphinium (4a) English Ivy (3e) German statice (6) Gomphrena (3a) Hollyhock (6) Impatiens (3a, 3b, 4a) Iris (5d) Liriope (6) Marigold (3a) Monarda (4c) Peony (6) Phlox (4c)

Snapdragon (5d)

#### Woody Ornamentals

Amelanchier (4d) Ash (4c) Azalea (2c, 4b) Bayberry (3n) Camelia (3e) Candvtuft (6) Cotoneaster (3i) Crabapple (3c, 3q, 4c, 5a) Crape Myrtle (4a) Dogwood (3h, 4c) Douglas Fir (5b) Elm (4c) Euonymus (3e, 4c) Hawthorn (5a) Holly (3r) Juniper (1a)

## Nonbearing Fruits and Nuts (Nurseries and Landscape Plantings)

Apple (3q, 4d, 5a)
Bartlett Pear (3q, 4c, 5a)
Cherry (2b, 3d)
Citrus (3m)
Nectarine (2b)
Peach (2b)
Peach (3b, 3c, 3f, 3l, 3n, 4e)

Plum (2b) Walnut (3j)

(continued)

Lilac (4c)

#### Herbaceous Ornamentals

Sweet William (Dianthus barbatus) (3k) Vinca (6)

Zinnia (4c)

#### **Woody Ornamentals**

Linden (3e, 3b, 4b) Magnolia (3e. 4b)

Maple (3e, 4f) Oaks (3p)

Pines (1b, 1c) Poplars (5b)

Privet (6) Pyracantha (3o)

Redbud (6)

Red Tip Photinia (3i)

Rhaphiolepsis (3e, 3i)

Rhododendron (2c, 3n) Roses (3a, 4e, 5c)

(Outdoor Use Only)

Shasta Fir (5e)

Sweet Gum (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 iuniperovora (Phomopsis Blight) [B]

  - b. Sirrococcus strobolinus (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. Colletotrichum spp. [B]
  - f. Cristulariella spp. (Zonate Leafspot) [C]
  - g. Diplocarpon rosae (Blackspot) [B]
  - h. Discula spp. (Anthracnose) [A]
  - i. Fabraea maculata (syn. Entomosporium maculata) [B]
  - j. Gnomonia leptostyla (Anthracnose) [C]
  - k. Heterosporium echinulatum [B]
  - I. Mycosphaerella caryigena (Downy Spot) [C]
  - m. Mycosphaerella fructicola (Greasy Spot) [El
  - 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. Ervsiphe 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]
- 6. Rust, Powdery Mildew, etc. [F]\*

#### \*Not registered for use in California.

#### **Table 3. Application Regimes**

- [A] Mix 2-4 fl. oz. (0.02-0.04 lbs A.I.) of Quali-Pro Propiconazole 14.3 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 Quali-Pro Propiconazole 14.3 when there is 5-10% bloom and again at 70-100% bloom. For dogwoods, apply the 2-4 fl. oz. (0.02-0.04 lbs A.I.) rate every 14 days or apply 8 fl. oz. (0.08 lbs A.I.) of Quali-Pro Propiconazole 14.3 every 28 days.
- [B] Mix 5-8 fl. oz. (0.05-0.08 lbs A.I.) of Quali-Pro Propiconazole 14.3 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 black spot. 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.
- [C] Mix 8-12 fl. oz. (0.08-0.12 lbs A.I.) of Quali-Pro Propiconazole 14.3 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. (0.12 lbs A.I.) atta beginning at bud break. Apply 3 times at 14-day intervals. For walnut, apply 8.5 fl. oz. (0.9 lbs A.I.) at 14- to 21-day intervals. For ray blight, apply 12 fl. oz. (0.12 lbs A.I.) at 7-day intervals or 20 fl. oz. (0.2 lbs A.I.) at 14-day intervals. For impatiens, bayberry, linden, magnolia, sweet gum, and wax myrtle, the maximum use rate is 8 fl. oz. (0.08 lbs A.I.) per 100 gals. of water.
- [D] Mix 16 fl. oz. (0.16 lbs A.I.) of Quali-Pro Propiconazole 14.3 in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 14 to 28 days, beginning when conditions are favorable for disease development. For Douglas fir needle rust, apply once in May. For tip blight, initiate applications in mid to late winter and apply 3 times at 2-month intervals.
- [E] Mix 20-24 fl. oz. (0.2-0.24 lbs A.I.) of Quali-Pro Propiconazole 14.3 in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply during June to August time period.
- [F] Apply 6-8 fl. oz. (0.06-0.08 lbs A.I.) per 100 gals. Crop tolerance has been demonstrated on these ornamental plants at this rate; however, you must follow the Note On Plant Tolerance section of the label above for phytotoxicity and disease control precautions.

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

#### STORAGE AND DISPOSAL

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

STORAGE: Store in a cool, dry area out of reach of children.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

#### CONTAINER HANDLING:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by puncture and dispose of in a sanitary landfill, or by incineration.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire direction for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following CONDITIONS, DISCLAIMER OF WARRANTIES, and LIMITATIONS OF LIABILITY.

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