Office of Registrati 1200 Penr	TAL PROTECTION AGENCY Pesticide Programs fon Division (7505T) nsylvania Ave., N.W. ngton, D.C. 20460	EPA Reg. Number: 45002-56	Date of Issuance: 12/21/22
NOTICE OF PESTIC	IDE:	Term of Issuance:	1
<u>X</u> Registration			
Reregistration (under FIFRA, as amende		Unconditional	
	,	Name of Pesticide Produ	ıct:
		Prothioconazole 4	4L
Name and Address of Registrant (include ZIP Code):			
Albaugh, LLC 1525 NE 36th Street Ankeny, IA 50021			
<b>Note:</b> Changes in labeling differing in substance from tha Registration Division prior to use of the label in commerc			
On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others. This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you: 1. Submit and/or cite all data required for registration/registration review of your product when the Agency requires all registrants of similar products to submit such data. <i>Continues page 2</i>			
Signature of Approving Official:		Date:	
Kristy Crews, Ph.D., Product Manager Fungicide Branch, Registration Divisio		12/21/2	2
EPA Form 8570-6 2. Make the following label change	es before you release the proc	luct for shipment:	

Registration Notice Unconditional v.20220527

Page 2 of 2 EPA Reg. No. 45002-56 Decision No. 578214

- Revise the EPA Registration Number to read, "EPA Reg. No. 45002-56."
- 3. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

• Basic CSF dated 10/25/2022

If you have any questions, please contact James Orrock by phone at 202-566-2862 or by email at orrock.james@epa.gov.

Enclosure

# **PROTHIOCONAZOLE 4L**

#### FOR CONTROL OF SPECIFIED DISEASES ON LISTED CROPS

#### **ACTIVE INGREDIENTS:**

Prothioconazole, 2-[2-(1-Chlorocyclopropyl)-3-	
(2-chlorophenyl)-2-hydroxypropyl]-1,2-dihydro-3H-1,2,4-triazole-3-thione	41.0%
OTHER INGREDIENTS:	
TOTAL:	100.0%

Contains 4 lbs/gal of prothioconazole

# KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID		
IF	Immediately call a poison control center or doctor for treatment advice.	
SWALLOWED:	• Do not induce vomiting unless told to do so by a poison control center or doctor.	
	<ul> <li>Have person sup a glass of water if able to swallow.</li> </ul>	
	Do not give anything by mouth to an unconscious person.	
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>	
	• 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 INHALED:	Move person to fresh air.	
	• If person is not breathing, call 911 or an ambulance, and then give artificial	
	respiration, preferably mouth-to-mouth if possible.	
	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. For non-emergency exposure information on this product, call 1-888-347-6732 (7 days/week,		
24-hr). For medic	al emergencies, dial 911.	

NOTE TO PHYSICIAN: No specific antidote. Treat symptomatically.

[See [inside] booklet for [additional] [complete] [First Aid,] [Precautionary Statements,] [Directions For Use,] [Storage and Disposal,] [and] [Conditions of Sale and Warranty].]

EPA Reg. No. 45002-XXX NET CONTENTS: \_\_\_\_\_ EPA Est. No.

MANUFACTURED BY: Albaugh, LLC Ankeny, Iowa 50021

For 24-hour chemical spill, leak, fire, exposure or accident response information, call CHEMTREC toll free at 1-800-424-9300.



045002-000LA.20221128.DRAFT

pesticide registered under EPA Reg. No. 45002-56

# PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if swallowed or inhaled. Avoid breathing spray mist. Causes moderate eye irritation. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of polyvinyl chloride (PVC) ≥14 mils, nitrile rubber ≥14 mils, or butyl rubber ≥14 mils
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### PHYSICAL-CHEMICAL HAZARDS

DO NOT mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

#### **ENGINEERING CONTROL STATEMENTS**

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 RECOMMEDATIONS

Users should:

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

# ENVIRONMENTAL HAZARDS

This product is toxic to estuarine/marine invertebrates, and freshwater/estuaries/marine aquatic plants. **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwater or rinsate.

Degradate of Prothioconazole are known to leach through soil into ground water under certain conditions as a result of label use. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

SURFACE WATER ADVISORY: This product may impact surface water quality due to runoff rainwater. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of Prothioconazole and degradates from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

# **DIRECTIONS FOR USE**

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

#### **RESTRICTIONS:**

**DO NOT** apply Prothioconazole with mechanically pressurized handgun equipment.

**DO NOT** apply Prothioconazole with mechanically pressurized handgun equipment to orchards or vineyards (Bushberry subgroup 13-07B, Low growing berry subgroup, except strawberry subgroup 13-07H), field crops (Cucurbit Vegetables (Crop Group 9), Corn, sweet, Garbanzos (including chickpeas); Lentils) or nursery pine and conifer seedlings (Shortleaf Loblolly, Slash, Longleaf and other pines, other conifers, other hardwoods).

**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 and notification to workers (as applicable). 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 workers to enter during the restricted-entry interval (REI) of 12 hours. Some crops have longer crop-specific REIs. Crop-specific REIs are listed in the Directions for Use section associated with the crop.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

#### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking, invert to prevent leakage. If the container is leaking or material is spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. **DO NOT** walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

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

CONTAINER HANDLING: (See the Net Contents section on the container to determine if it non-refillable or refillable.) APPROPRIATE BOX MUST BE CHECKED.

<u>Non-refillable containers (1 and 2.5 gallon)</u>: **DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

<u>Non-refillable containers (>5 gallon)</u>: **DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable containers: Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose.

When this container is empty, replace the cap and seal all openings that have been made during usage and return the container to the point of purchase, or to an alternate location designated by the manufacturer at the time of purchase of this product. If not returned, clean container the empty container and offer for recycling, if available.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

If the container cannot be refilled, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### **PRODUCT INFORMATION**

PROTHIOCONAZOLE 4L is a broad-spectrum systemic fungicide for the control of Ascomycetes, Basidiomycetes and Deuteromycetes diseases in barley, buckwheat, bushberry subgroup, low growing berry subgroup (except strawberry), corn, cotton, cucurbit vegetables, dry shelled pea and bean crop subgroup, millet, oats, peanut, rapeseed subgroup 20A (including canola and *Brassica carinata*), rice, rye, soybean, sugar beets, titicale, wheat; conifer and hardwood nursery seeds and seedlings. Under conditions conducive to extended infection periods or high disease pressure, another registered fungicide may be needed once this product's maximum application rates have been reached. Under these conditions use another fungicide registered for the crop/disease. Equipment must be properly calibrated before use.

#### **RESISTANCE MANAGEMENT**

For resistance management, PROTHIOCONAZOLE 4L contains a Group 3 fungicide. Any fungal population may contain individuals naturally resistant to PROTHIOCONAZOLE 4L and other Group 3 fungicides. A gradual or total loss of pest control may occur over time if these fungicides/bactericides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of PROTHIOCONAZOLE 4L or other Group 3 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides 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 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 resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact your local Albaugh, LLC sales representative. You can also contact your pesticide distributor or university extension specialist to report resistance.

#### **APPLICATION PROCEDURES**

**SPRAY EQUIPMENT/VOLUMES:** PROTHIOCONAZOLE 4L may be applied by either ground, aerial and/or chemigation application equipment. Refer to the USE DIRECTIONS FOR SPECIFIC CROPS section of this label for approved applications for each crop.

Apply in a minimum of 10 gallons of spray solution per acre by ground sprayer. Apply in a minimum of 5 gallons of spray solutions per acre by aircraft spray equipment unless stated differently elsewhere in this label. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied. If necessary, increase the spray volume per acre for complete crop coverage.

**MIXING PROCEDURES:** 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 tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Prepare no more spray mixture than is necessary for the immediate operation. Thoroughly clean spray equipment before using this product. Maintain maximum agitation throughout the spray operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to the previously treated area or dispose of the rinsate according to local regulations.

**PROTHIOCONAZOLE 4L Alone:** Add ½ of the required amount of water to the mix tank. With the agitator running, add the product to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the product has completely and uniformly dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**PROTHIOCONAZOLE 4L with Tank-Mix Partners:** Add ½ of the required amount of water to the mix tank. Start the agitator running before adding any of the tank-mix partners. In general, tank-mix partners should be added in this order: products packaged in water-soluble packaging\*, wettable powders, wettable granules (dry flowables), liquid flowables, liquids and emusifiable concentrates. Always allow each tank-mix partner to become fully and uniformly dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied. \* **Note:** When using PROTHIOCONAZOLE 4L in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank-mix partner. Allow the water-soluble packaging to completely disperse before adding any other tank-mix partner to the tank.

If using PROTHIOCONAZOLE 4L in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and restrictions; 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 must not be mixed with any product that 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.

PROTHIOCONAZOLE 4L is compatible with most insecticide, fungicide, herbicide and foliar nutrient products. However, the physical compatibility of PROTHIOCONAZOLE 4L with tank-mix partners should be tested before use. To determine the physical compatibility of PROTHIOCONAZOLE 4L with other products, use a jar test, as described below.

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 liquids, and emusifiable 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. For further information contact your local Albaugh, LLC representative.

The crop safety of all potential tank mixes including additives and other pesticides on all crops has not been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed. To test for crop safety, apply PROTHIOCONAZOLE 4L to the target crop in a small area and in accordance with label instructions for the target crop.

**AERIAL APPLICATION:** Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply directly to humans or animals.

**CHEMIGATION:** Apply PROTHIOCONAZOLE 4L through irrigation equipment only to crops for which chemigation is specified on this label.

PROTHIOCONAZOLE 4L 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, drip, linear, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system. Illegal pesticide residues in the crop can result from nonuniform

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.

#### **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 for treatment.

**Center Pivot Irrigation Equipment:** Notes: (1) Use only with drive systems, which provide uniform water distribution. (2) Do not use end guns when chemigating PROTHIOCONAZOLE 4L 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 PROTHIOCONAZOLE 4L 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 PROTHIOCONAZOLE 4L required to treat the area covered by the irrigation system. Add the required amount of PROTHIOCONAZOLE 4L 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 PROTHIOCONAZOLE 4L 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 PROTHIOCONAZOLE 4L solution has cleared the sprinkler head.

**Solid Set and Moving Wheel Irrigation Equipment:** When applying PROTHIOCONAZOLE 4L through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Determine the amount of PROTHIOCONAZOLE 4L required to treat the area covered by the irrigation system. Add the required amount of PROTHIOCONAZOLE 4L 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 PROTHIOCONAZOLE 4L solution has cleared the last sprinkler head.

**Adjuvants:** PROTHIOCONAZOLE 4L is recommended to be used with a registered non-ionic surfactant at the lowest specified labeled rate for most crops. Refer to the USE DIRECTIONS FOR SPECIFIC CROPS for specific uses where a surfactant is not recommended.

**SOILBORNE/SEEDLING DISEASE CONTROL:** PROTHIOCONAZOLE 4L can provide control of certain soilborne/seedling diseases when applied as an in-furrow application at a time of planting or as a banded application applied over the row at the time of planting and up to row closure on certain crops. Refer to the USE DIRECTIONS FOR SPECIFIC CROPS section of the label to determine which crops contain recommendations for in-furrow and/or banded applications and for the optimal timings, rates and band widths of these applications.

#### **In-Furrow Application:**

- Apply PROTHIOCONAZOLE 4L as an in-furrow application in 2.5 to 20 gallons of water at planting.
- Mount the spray nozzle such that the spray is directed into the furrow just before the seeds are covered.

#### **Banded Application:**

• Apply PROTHIOCONAZOLE 4L as a directed spray to the soil, using single or multiple nozzles which can be adjusted to provide uniform coverage of the lower stems and the soil surface surrounding the plants.

Rate per 1000 Row Feet	Rate of PROTHIOCONAZOLE 4L for In-Furrow and Banded Applications (fl oz/A)								
fl oz product	15" rows	20" rows	22" rows	30" rows	32" rows	34" rows	36" rows	38" rows	40" rows
0.075	2.61								
0.100	3.48	2.61							
0.125	4.36	3.27	2.97						
0.150	5.23	3.92	3.56	2.61					
0.175	6.10	4.57	4.16	3.05	2.86	2.69			
0.200	6.97	5.23	4.75	3.48	3.27	3.07	2.90	2.75	2.61
0.225		5.88	5.35	3.92	3.68	3.46	3.27	3.10	2.94
0.250		6.53	5.94	4.36	4.08	3.84	3.63	3.44	3.27
0.275			6.53	4.79	4.49	4.23	3.99	3.78	3.59
0.300				5.23	4.90	4.61	4.36	4.13	3.92
0.325				5.66	5.31	5.00	4.70	4.47	4.25
0.350				6.10	5.72	5.38	5.08	4.81	4.57
0.375				6.53	6.13	5.77	5.45	5.16	4.90
0.400				6.97	6.53	6.15	5.81	5.50	5.23
0.425					6.94	6.53	6.17	5.85	5.55
0.450						6.92	6.53	6.19	5.88
0.475							6.90	6.53	6.21
0.500								6.88	6.53
0.525									6.86
0.543									7.10

**ROTATIONAL RESTRICTIONS:** Treated areas may be replanted with any crop specified on this label as soon as practical after last application. For crops not listed on this label, do not plant back within 30 days of last application.

**SPRAY DRIFT DIRECTIONS:** Do not make applications when conditions favor drift beyond the target application area. When drift may be a problem, take measures to reduce drift, including:

 Do not spray if wind speeds are or become excessive. Do not spray if wind speed is 15 mph or greater. If non-target crops are located downwind, use caution when spraying if wind is present. Do not spray if winds are gusty.

- 2. Use caution when conditions are favorable for drift (high temperatures, drought, and low relative humidity).
- 3. Do not apply when temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.

# OBSERVE THE FOLLOWING RESTRICTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, AND ESTUARIES.

Apply only during alternate years in fields adjacent to aquatic areas listed above. Do not apply by ground or air within 100 feet of aquatic areas listed above. Do not cultivate within 10 feet of an aquatic area to allow growth of a vegetative filter strip.

# SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### **Controlling Droplet Size – Aircraft**

• Adjust Nozzles – Follow nozzle manufacturer's recommendations for setting up nozzles. Generally. to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud

(under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### Handheld Technology Applications:

Take precautions to minimize spray drift.

## **USE DIRECTIONS FOR SPECIFIC CROPS**

PROTHIOCONAZOLE 4L provides control or suppression of many important diseases of barley, buckwheat, bushberry subgroup, low growing berry subgroup (except strawberry), corn, cotton, cucurbit vegetables, dry shelled pea and bean crop subgroup, rice, millet, oats, peanuts, rapeseed subgroup 20A (including canola and *Brassica carinata*), rye, soybean, sugar beets, triticale, wheat; conifer and hardwood nursery seeds and seedlings. When reference is made to disease suppression, suppression can mean either erratic control from good to fair or consistent control at a level below that obtained with the best commercial disease control products.

BARLEY				
Disease Controlled	Rate of PROTHIOCONAZOLE 4L			
Fusarium Head Blight ( <i>Fusarium</i> spp.) (Suppression Only)	5.0-5.7 fl oz/A (0.156-0.178 lbs ai/A)			
<b>APPLICATION TIMING:</b> The optimal time to apply PROTHIOCONAZOLE 4L is as a preventative foliar spray when barley heads on the main stem are fully emerged (~ Feekes Growth Stages 10.5). Spray equipment must be set to provide good coverage to barley heads. For thorough coverage of barley head using ground application equipment, it is recommended to use forward and backward mounted nozzles or nozzles that have a two-directional spray. Nozzles should be operated within the spray pressure directions suggested by the manufacturer.				
Leaf and Stem Diseases: Net Blotch ( <i>Pyrenophora teres</i> ) Powdery Mildew ( <i>Blumeria graminis</i> f. sp. <i>Hordei</i> ) Rusts ( <i>Puccinia</i> spp.) Scald ( <i>Rhynchosporium secalis</i> ) Spot Blotch ( <i>Cochliobolus sativus</i> )	2.8-4.3 fl oz/A (0.088-0.134 lbs ai/A)			
<b>APPLICATION TIMING:</b> Apply PROTHIOCONAZOLE 4L as a preventative foliar spray when the earliest disease symptoms appear on the leaves or stems. Barley fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.				
PROTHIOCONAZOLE 4L may be applied by either ground, aerial, or chemigation application equipment. For aerial applications made prior to heading (prior to Feekes Growth Stage 10.5), apply a minimum of 2 gpa spray solution. For aerial applications made at the heading growth stage or later, apply in a minimum of 5 gpa spray solution. Chemigation use is allowed only for applications made prior to heading.				
<b>USE RESTRICTIONS:</b> Apply up to two (2) applications of PROTHIOCONAZOLE 4L per year. Repeat applications using a 14-day spray interval if conditions remain favorable for continued or increasing disease development. For optimum disease control, the lowest labeled rate of a spray surfactant should be tank mixed with PROTHIOCONAZOLE 4L.				
A maximum of 9.37 fl oz (0.293 lbs prothioconazole) of PROTHIOCONA Do not apply within 32 days of harvest.	AZOLE 4L may be applied per acre per year.			

#### **BUSHBERRY SUBGROUP (SUBGROUP 13-07B)**

Aronia berry; blueberry (highbush and lowbush); Chilean guava; highbush cranberry; currant (black, buffalo, and red); elderberry; European barberry; gooseberry; edible honeysuckle; huckleberry; jostaberry; juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; and cultivars, varieties, and/or hybrids of these.

Disease Controlled	Rate of PROTHIOCONAZOLE 4L	
Septoria Leaf Spot ( <i>Septoria</i> spp.) Monilinia Blight ( <i>Monilinia vaccinii-corymbosi</i> ) Valdensinia Leaf Spot ( <i>Valdensinia heterodoxa</i> ) Leaf Rust ( <i>Thekopsora minima</i> ) Anthracnose ( <i>Colletotrichum gloeosporioides</i> ) Botrytis Blight ( <i>Botrytis cinerea</i> ) Phomopsis Canker and Twig Blight <sup>[1]</sup> ( <i>Phomopsis vaccinii</i> ) Alternaria Fruit Rot <sup>[1]</sup> ( <i>Alternaria</i> spp.) White Pine Blister Rust <sup>[1]</sup> ( <i>Cronartium ribicola</i> )	5.7 fl oz/A (0.178 lbs ai/A)	
<b>APPLICATION TIMING:</b> Apply PROTHIOCONAZOLE 4L at the first sign of disease.		

PROTHIOCONAZOLE 4L may be applied by either ground or chemigation application equipment.

**USE RESTRICTIONS:** Apply up to two (2) applications of PROTHIOCONAZOLE 4L per year. Repeat applications using a 7- to 10-day spray interval if conditions remain favorable for continued or increasing disease development.

A maximum of 11.4 fl oz (0.356 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Do not apply within 7 days of harvest.

[<sup>1</sup>Not registered for use in California.]

LOW GROWING BERRY SUBGROUP, EXCEPT STRAWBERRY <sup>[1]</sup>				
Bearberry; bilberry; cloudberry; cranberry; muntries; partridgeberry; and cultivars, varieties, and/or hybrids of these.				
Disease Controlled	Rate of PROTHIOCONAZOLE 4L			
Fruit Rot: Coleophoma empetri Glomerella cingulata Phyllosticta vaccinii Physalospora vaccinii Allantophomopsis lycopodina Allantophomopsis cytisporea Fusicoccum putrefaciens Penicillium spp. Phomopsis vaccinii Colletotrichum acutatum Botrytis spp.	5.0 fl oz/A (0.156 lbs ai/A)			
<i>Monilinia</i> spp. Valdensinia Leaf Spot ( <i>Valdensinia heterodoxa</i> )				
<b>APPLICATION TIMING:</b> For best control of fruit rots, begin applications of PROTHIOCONAZOLE 4L at early bloom. Make a second application of PROTHIOCONAZOLE 4L or another approved fungicide 7-10 days later.				
PROTHIOCONAZOLE 4L may be applied by either ground or chemigation application equipment.				

**USE RESTRICTIONS:** Apply up to two (2) applications of PROTHIOCONAZOLE 4L per year. Repeat applications as needed using a 7- to 10-day spray interval if conditions remain favorable for continued or increasing disease development.

A maximum of 10.0 fl oz (0.313 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Do not apply within 45 days of harvest.

[<sup>1</sup>Not registered for use in California.]

BUCKWHEAT, MILLET (PEARL), MILLET (PROSO), OATS, RYE			
Disease Controlled	Rate of PROTHIOCONAZOLE 4L		
Rusts ( <i>Puccinia</i> spp.)			
Glume Blotch (Stagonospora nodorum)			
Head Blight or Scab (Fusarium graminearum) – Suppression			
Powdery Mildew (Erysiphe graminis)	5.0-5.7 fl oz/A		
Scald (Rhynchosporium secalis)	(0.156-0.178 lbs ai/A)		
Speckled Blotch (Septoria avenae; Septoria tritici)			
Spot Blotch (Bipolaris sorokiniana)			
Tan Spot or Yellow Leaf Spot (Pyrenophora tritici-repentis)			

**APPLICATION TIMING:** Apply PROTHIOCONAZOLE 4L as a preventative foliar spray when the earliest disease symptoms appear on the leaves or stems. Fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.

PROTHIOCONAZOLE 4L may be applied by either ground or aerial application equipment.

**USE RESTRICTIONS:** Apply only one (1) application of PROTHIOCONAZOLE 4L per year.

A maximum of 5.7 fl oz (0.178 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Do not apply within 30 days of harvest.

CORN (FIELD CORN, FIELD CORN GROWN FOR SEED AND POPCORN)			
Disease Controlled	Rate of PROTHIOCONAZOLE 4L		
Anthracnose Leaf Blight ( <i>Colletotrichum graminicola</i> ) Eye Spot ( <i>Aureobasidium zeae</i> ) Gray Leaf Spot ( <i>Cercospora zeae-maydis</i> ) Northern Corn Leaf Blight ( <i>Setosphaeria turcica</i> ) <sup>1</sup> Northern Corn Leaf Spot ( <i>Cochliobolus carbonum</i> ) <sup>1</sup> Rust ( <i>Puccinia</i> spp.) Southern Corn Leaf Blight ( <i>Cochliobolus heterostrophus</i> ) <sup>1</sup> <b>APPLICATION TIMING:</b> Apply PROTHIOCONAZOLE 4L at the first sig on a 7- to 14-day interval if favorable conditions for disease developme made between V8 (8 leaf collar) and VT (lowest branch of the tassel is	nt persist. DO NOT use adjuvants in sprays		
SUPPRESSION ONLY:         Fusarium <sup>[2]</sup> Ear Rot ( <i>Fusarium</i> spp.)         Gibberella <sup>[2]</sup> Ear Rot ( <i>Gibberella</i> spp.)         Aspergillus <sup>[2]</sup> Ear Rot ( <i>Aspergillus</i> spp.)         APPLICATION TIMING: For optimum suppression, apply PROTHIC         emergence) to the R2 (brown silk) corn growth stages. PROTHICCONAL         and levels of mycotoxin in the grain.			
<u>Soilborne/Seedling Diseases:</u> Rhizoctonia Root <sup>[2]</sup> and Stalk Rot <sup>[2]</sup> ( <i>Rhizoctonia solani</i> )	2.6-4.0 fl oz/A (0.081-0.125 lbs ai/A)		
APPLICATION TIMING: In furrow application for soilborne/seedling d chart for various row spacing under the SOILBORNE/SEEDLING DISE	isease control, see use directions and rate		
PROTHIOCONAZOLE 4L may be applied by either ground, aerial, or chemigation application equipment. For aerial applications apply PROTHIOCONAZOLE 4L using a minimum of 3 gpa spray solution. An adjuvant may be used to improve spray coverage. Refer to the adjuvant product label for specific use directions. <b>USE RESTRICTIONS:</b> Application of PROTHIOCONAZOLE 4L is not recommended at times when corn is under severe environmental stress conditions.			
Do not exceed 22.8 fl oz (0.713 lbs prothioconazole) total from all uses, including soil and foliar applications, per acre of PROTHIOCONAZOLE 4L per year. Do not apply within 14 days of harvest for grain and fodder. Forage may be harvested the same day of application.			
<sup>1</sup> The above diseases are also known as Helminthosporium Leaf Blights	5.		

[<sup>2</sup>Not registered for use in California.]

COTTON			
Disease Suppressed	Rate of PROTHIOCONAZOLE 4L		
In Furrow and Banded:	5.7-7.1 fl oz/A		
Damping Off ( <i>Rhizoctonia solani</i> )	(0.178-0.222 lbs ai/A)		
Fusarium Wilt <sup>[1]</sup> ( <i>Fusarium</i> spp.)       (0.4-0.5 fl oz per 1000 row feet) <b>APPLICATION DIRECTIONS:</b> For in-furrow applications: Apply 5.7-7.1 fl oz per acre (0.393-0.489 fl oz per 1000 row feet if on 36 inch row spacing) in the furrow at planting. For banded applications: PROTHIOCONAZOLE 4L may also be applied in a 4- to 6-inch band over the row at or near emergence.			
<u>Foliar:</u> Target Spot ( <i>Corynespora cassiicola</i> ) Rust ( <i>Puccinia</i> spp.)	5.0-5.7 fl oz/A (0.156-0.178 lbs ai/A)		
<b>APPLICATION DIRECTIONS:</b> PROTHIOCONAZOLE 4L may be application equipment.	applied by ground, aerial, or chemigation		
<b>USE RESTRICTIONS:</b> When used at 5.0-5.7 fl oz per acre, do not apply more than three (3) applications of PROTHIOCONAZOLE per year including the in-furrow, banded and foliar applications. If any application is made at a rate above 5.7 fl oz per acre, do not make more than two (2) total applications per year including in-furrow, banded, and foliar applications. Repeat applications as needed using a 14-day spray interval if conditions remain favorable for continued or increasing diseases development.			
A maximum of 17.1 fl oz (0.534 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year including all soil and foliar applications. Do not apply within 30 days of harvest.			

[<sup>1</sup>Not registered for use in California.]

CHICKPEA			
Disease Controlled	Rate of PROTHIOCONAZOLE 4L		
Ascochyta Blight ( <i>Ascochyta</i> spp.)	5.0-5.7 fl oz/A (0.156-0.178 lbs ai/A)		
<b>APPLICATION TIMING:</b> Apply PROTHIOCONAZOLE 4L at the first sign of disease. Use the higher use rate when conditions are favorable for severe disease pressure and/or when growing susceptible varieties.			
PROTHIOCONAZOLE 4L may be applied by either ground, aerial or chemigation application equipment.			
<b>USE RESTRICTIONS:</b> Apply up to three (3) applications of PROTHIOCONAZOLE 4L per year. Repeat applications as needed using a 10- to 14-day spray interval if conditions remain favorable for continued or increasing disease development. To optimize disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with PROTHIOCONAZOLE 4L.			

A maximum of 17.1 fl oz (0.534 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Allow a minimum of 7 days from the last application until cutting or swathing the crop for harvest.

#### **CUCURBIT VEGETABLES (CROP GROUP 9)**

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; edible gourd (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); pumpkin; squash (summer and winter, includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini, butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon

Disease Controlled	Rate of PROTHIOCONAZOLE 4L
Fusarium Wilt, Fusarium Blight ( <i>Fusarium oxysporum; Fusarium</i> spp.) Gummy Stem Blight ( <i>Didymella</i> spp.) Southern Blight <sup>[1]</sup> ( <i>Sclerotium roflsii</i> )	Soil: 5.7 fl oz/A (0.178 lbs ai/A)
Powdery Mildew (Sphaerotheca fuliginea I Podosphaera xanthii) (Erysiphe cichoracearum)	Foliar: 5.7 fl oz/A (0.178 lbs ai/A)

**APPLICATION DIRECTIONS:** PROTHIOCONAZOLE 4L may be applied by either ground or chemigation application equipment (including drip irrigation). Do not use in water used for hand transplanting. Not for use in greenhouse/transplant house.

**USE RESTRICTIONS:** Apply up to one (1) soil application and two (2) foliar applications of PROTHIOCONAZOLE 4L per year. Repeat applications as needed using a 5- to 10-day spray interval if conditions remain favorable for continued or increasing disease development.

A maximum of 17.1 fl oz (0.534 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Do not apply within 7 days of harvest.

[<sup>1</sup>Not registered for use in California.]

#### DRIED SHELLED PEAS AND BEANS SUBGROUP (EXCEPT SOYBEANS)

*Lupinus* spp. (grain, sweet, white and white sweet lupins); *Phaseolus* spp. (field, kidney, dry lima, navy, pinto and tepary beans); *Vigna* spp. (adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea and urd bean); dry broad bean; guar; lablab bean; *Pisum* spp. (pea (including field pea) and pigeon pea)

Disease Suppressed	Rate of PROTHIOCONAZOLE 4L	
In Furrow:	2.6-5.0 fl oz/A	
Rhizoctonia rots <sup>[1]</sup> ( <i>Rhizoctonia</i> spp.)	(0.081-0.156 lbs ai/A)	
APPLICATION DIRECTIONS: Apply up to 5.0 fl oz per acre (0.288 fl oz per 1000 row feet if on 30 inch row spacing;		
0.192 fl oz per 1000 row feet if on a 20 inch row spacing) in the furrow at planting. See use directions and rate chart		
for various row spacing under the SOILBORNE/SEEDLING DISEASE CONTROL section.		

Foliar:	
Ascochyta Blight (Asochyta pinodes)	5.7 fl oz/A
Rust (Uromyces appendiculatus)	(0.178 lbs ai/A)
White Mold (Sclerotinia sclerotiorum)	

**APPLICATION DIRECTIONS:** For rust control, apply PROTHIOCONAZOLE 4L at the first sign of disease. For white mold control, apply PROTHIOCONAZOLE 4L at 25% flower.

PROTHIOCONAZOLE 4L may be applied by either ground, aerial or chemigation application equipment. For ground applications, apply in a minimum of 20 gpa.

**USE RESTRICTIONS:** Apply up to three (3) applications of PROTHIOCONAZOLE per year. Repeat applications as needed using a 5- to 14-day spray interval if conditions remain favorable for continued or increasing disease development. To optimize disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with PROTHIOCONAZOLE 4L.

A maximum of 17.1 fl oz (0.534 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Allow a minimum of 7 days from the last application until cutting or swathing the crop for harvest.

[<sup>1</sup>Not registered for use in California.]

LENTILS	
Disease Controlled	Rate of PROTHIOCONAZOLE 4L
Ascochyta Blight ( <i>Ascochyta</i> spp.)	4.3-5.7 fl oz/A (0.134-0.178 lbs ai/A)
APPLICATION TIMING: Apply PROTHIOCONAZOLE 4L at early flower or the first sign of disease. Use the higher	

use rate when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.

PROTHIOCONAZOLE 4L may be applied by either ground, aerial or chemigation application equipment.

**USE RESTRICTIONS:** Apply up to three (3) applications of PROTHIOCONAZOLE 4L per year. Repeat applications as needed using a 10- to 14-day spray interval if conditions remain favorable for continued or increasing disease development. To optimize disease control, the lowest labeled rate of a spray surfactant should be tank-mixed with PROTHIOCONAZOLE 4L.

A maximum of 17.1 fl oz (0.534 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Allow a minimum of 7 days from the last application until cutting or swathing the crop for harvest.

#### RAPESEED SUBGROUP 20A (INCLUDING CANOLA AND BRASSICA CARINATA<sup>[1]</sup>)

Borage; *Brassica carinata;* crambe; cuphea; echium; flax; gold of pleasure; hare's ear mustard; lesquerella; lunaria; meadowfoam; milkweek; mustard seed; oil radish; poppy seed; rapeseed; sesame; sweet rocket; cultivars, varieties, and/or hybrids of these.

Disease Controlled	Rate of PROTHIOCONAZOLE 4L
Sclerotinia Stem Rot; White Mold (Sclerotinia sclerotiorium)	4.3-5.7 fl oz/A (0.134-0.178 lbs ai/A)

**APPLICATION TIMING:** Apply PROTHIOCONAZOLE 4L when the crop is in the 20-50% bloom stage. Best protection will be achieved when the fungicide is applied prior to petals beginning to fall, and will allow for the maximum number of petals to be protected. Utilize the higher rate for fields with a history of heavy disease pressure or for dense crop stands. Good spray coverage of the plants is essential. PROTHIOCONAZOLE 4L may be applied until the 50% bloom stage.

PROTHIOCONAZOLE 4L may be applied by either ground, aerial or chemigation application equipment.

**USE RESTRICTIONS:** Apply up to two (2) applications of PROTHIOCONAZOLE 4L per year. A second application may be made after 14 days if conditions remain favorable for continued or increasing disease development. The lowest labeled rate of a non-ionic surfactant may be tank-mixed with PROTHIOCONAZOLE 4L.

A maximum of 11.4 fl oz (0.356 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Do not apply within 36 days of harvest.

[<sup>1</sup>Not registered for use in California.]

PEANUT <sup>[1]</sup>	
Disease Suppressed	Rate of PROTHIOCONAZOLE 4L
In Furrow and Banded: Sclerotium Rot, White Mold, Southern Blight, Southern Stem Rot (Sclerotium rolfsii) Rhizoctonia Limb Rot ( <i>Rhizoctonia solani</i> ) Early Leaf Spot ( <i>Cercospora arachidicola</i> ) Late Leaf Spot ( <i>Cercosporidium personatum</i> ) Cylindrocladium Black Rot (CBR) ( <i>Cylindrocladium crotalariae</i> ) (Suppression with in furrow only) <b>APPLICATION TIMING:</b> Apply 5.7 fl oz per acre (0.4 fl oz per 1000 row at planting. PROTHIOCONAZOLE 4L may also be applied in a 4- to 6- ir Albaugh, LLC recommends a minimum application volume of 20 gpa.	
Soil-Borne: Sclerotium Rot, White Mold, Southern Blight, Southern Stem Rot (Sclerotium rolfsii) Rhizoctonia Limb Rot, Peg Rot, Pod Rot ( <i>Rhizoctonia solani</i> ) Cylindrocladium Black Rot (CBR) ( <i>Cylindrocladium crotalariae</i> ) (Suppression only) APPLICATION TIMING: For optimum control of the specified soil-born	
PROTHIOCONAZOLE 4L must be made at 14-day intervals. In a typica 40 days after planting or as recommended by the local Extension Se applied for sprays 3, 4, 5, and 6. Application of fungicides with a differ and following applications of PROTHIOCONAZOLE 4L to discourage d PROTHIOCONAZOLE 4L in conjunction with cultural practices that are diseases, such as proper crop rotation practices. For control of soil-borne diseases when using a <b>Leaf Spo</b> PROTHIOCONAZOLE 4L in the first advisory spray in July and continu 14-day intervals. PROTHIOCONAZOLE 4L must be carried by rainfall or irrigation into the pod rots caused by <i>Sclerotium rolfsii</i> and <i>Rhizoctonia solani</i> . Drought of PROTHIOCONAZOLE 4L against the root and pod rots.	ervice, PROTHIOCONAZOLE 4L should be rent mode of action should be made prior to evelopment of resistant strains of fungi. Use e known to reduce the severity of soil-borne ot Advisory Program schedule, apply ue PROTHIOCONAZOLE 4L applications at he root and pod zone for control of root and
Foliar:Early Leaf Spot (Cercospora arachidicola)Late Leaf Spot (Cercosporidium personatum)Leaf Rust (Puccinia arachidis)Web Blotch (Phoma arachidicola)Leaf Scorch and Pepper Spot (Leptosphaerulina crassiasca)APPLICATION TIMING: Apply the specified rate in a preventative spraya 14-day interval. Use the higher use rate when conditions are favorabgrowing less disease resistant varieties.	5.0-5.7 fl oz/A (0.156-0.178 lbs ai/A) y schedule. Apply up to four (4) sprays using le for severe disease pressure and/or when
<ul> <li>PROTHIOCONAZOLE 4L may be applied by either ground, aerial, or chemigation application equipment.</li> <li>USE RESTRICTIONS: Apply up to four (4) applications of PROTHIOCONAZOLE 4L per year, including the infurrow and banded applications. When planting varieties with good to excellent levels of resistance to foliar diseases, the application interval may be extended up to 21 days in the absence of soil borne diseases.</li> <li>A maximum of 22.8 fl oz (0.713 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. PROTHIOCONAZOLE 4L may be applied up to 14 days before harvest. Do not feed hay or threshings or allow livestock to graze in treated areas.</li> </ul>	
[ <sup>1</sup> Not registered for use in California.]	

RICE <sup>[1]</sup>		
Disease Controlled	Rate of PROTHIOCONAZOLE 4L	
Sheath/Stem Diseases:         Sheath Blight ( <i>Rhizoctonia solani</i> )         Foliar Diseases:         Brown Spot ( <i>Cochliobolus miyabeanus</i> )         Narrow Brown Leafspot ( <i>Cercospora oryzae</i> )         Leaf Smut ( <i>Entyloma oryzae</i> )         False Smut ( <i>Ustilaginoidea virens</i> )         APPLICATION TIMING: Apply PROTHIOCONAZOLE 4L at initial sign of disease. Exact timing for rice disease         control is dependent on rice growth stage, rice variety, the type of disease to be controlled and disease severity.         Applications typically will occur from panicle differentiation to late boot. Do not apply PROTHIOCONAZOLE 4L later         than 70% panicle emergence from the boot. Consult with your local extension personnel or Albaugh, LLC		
PROTHIOCONAZOLE 4L may be applied by either ground or aerial spray equipment.		
USE RESTRICTIONS: Apply only one (1) application of PROTHIOCONAZOLE 4L per year.		
A maximum of 4.5 fl oz (0.141 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Do not apply within 40 days of harvest. Not for use in California.		
[ <sup>1</sup> Not registered for use in California.]		

SOYBEAN		
Disease Controlled Rate of PROTHIOCONAZOLE 4L		
Asian Soybean Rust ( <i>Phakopsora pachyrhizi</i> ) Frog Eye Leaf Spot ( <i>Cercospora sojina</i> ) Powdery Mildew ( <i>Microsphaera diffusa</i> ) Brown Spot <sup>[1]</sup> ( <i>Septoria glycines</i> )	2.5-3.0 fl oz/A (0.078-0.094 lbs ai/A)	
Alternaria Leaf Spot <sup>[1]</sup> ( <i>Alternaria</i> spp.) Anthracnose <sup>[1]</sup> ( <i>Colletotrichum truncatum</i> ) Asian Soybean Rust <sup>[1]</sup> ( <i>Phakopsora pachyrhizi</i> ) Brown Spot <sup>[1]</sup> ( <i>Septoria glycines</i> ) Cercospora Blight <sup>[1]</sup> ( <i>Cercospora kikuchii</i> ) Frog Eye Leaf Spot <sup>[1]</sup> ( <i>Cercospora sojina</i> ) Pod & Stem Blight <sup>[1]</sup> ( <i>Diaporthe phaseolorum</i> ) Powdery Mildew <sup>[1]</sup> ( <i>Microsphaera diffusa</i> ) Rhizoctonia Aerial Blight <sup>[1]</sup> ( <i>Rhizoctonia solanil</i> ) Sclerotinia Stem Rot AKA White Mold ( <i>Sclerotinia sclerotiorum</i> ) (Suppression only)	3.0-5.0 fl oz/A (0.094-0.156 lbs ai/A)	
APPLICATION TIMING: Apply PROTHIOCONAZOLE 4L as a broadcast, preventative foliar spray or at first visible symptoms of the disease. Repeat applications on a 10- to 21-day spray interval if environmental conditions are favorable for continued disease development. Use of the higher rate and shorter spray intervals are recommended when disease pressure is severe. Sclerotinia Stem Rot (Suppression Only): Apply PROTHIOCONAZOLE 4L as a broadcast foliar spray at R1 (beginning bloom) when conditions are favorable for disease development. A sequential treatment of PROTHIOCONAZOLE 4L or other registered fungicide may be applied by ground or air. Apply in a minimum of 10 gallons of spray solution per acre by ground sprayer or in a minimum of 5 gallons of spray solution per acre by aircraft equipment.		
In Furrow:       2.6-5.0 fl oz/A         Rhizoctonia Rots <sup>[1]</sup> ( <i>Rhizoctonia</i> spp.)       (0.081-0.156 lbs ai/A) <b>APPLICATION TIMING:</b> Apply up to 5.0 fl oz per acre (0.288 fl oz per 1000 row feet if on 30 inch row spacing;       0.192 fl oz per 1000 row feet if on a 20 inch row spacing) in the furrow at planting. See use directions and rate chart for various row spacing under the SOILBORNE/SEEDLING DISEASE CONTROL section.		
<ul> <li>PROTHIOCONAZOLE 4L may be applied by either ground, aerial, or chemigation application equipment. For aerial application, apply in a minimum spray volume of 2 gpa.</li> <li>USE RESTRICTIONS: Do not apply more than three (3) applications per year including all soil and foliar applications.</li> <li>A maximum of 12.9 fl oz (0.403 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Applications may not be made within 21 days of harvest.</li> </ul>		
[ <sup>1</sup> Not registered for use in California.]		

SUGAR BEETS		
Disease Controlled	Rate of PROTHIOCONAZOLE 4L	
In Furrow and Banded: Rhizoctonia Stem Canker, Root Rot, Crown Rot ( <i>Rhizoctonia solani</i> ) <b>APPLICATION TIMING:</b> Apply up to 5.7 fl oz per acre (0.4 fl oz per 10 furrow at planting. See use directions and rate chart for various rows	spacing under the SOILBORNE/SEEDLING	
DISEASE CONTROL section. For soil-borne disease control: Apply PROTHIOCONAZOLE 4L in a seven-inch band at the 4-leaf to row closure growth stage.		
<u>Foliar:</u> Cercospora Leaf Spot ( <i>Cercospora beticola</i> ) Powdery Mildew ( <i>Erysiphe polygoni</i> )	5.0-5.7 fl oz/A (0.156-0.178 lbs ai/A)	
<b>APPLICATION TIMING:</b> Apply PROTHIOCONAZOLE at the first sign of disease. Use the higher use rate and shorter intervals when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties.		
PROTHIOCONAZOLE 4L may be applied by either ground, aerial or chemigation application equipment. <b>USE RESTRICTIONS:</b> Apply up to three (3) applications of PROTHIOCONAZOLE per year including all soil and foliar applications. Repeat applications as needed using a 14- to 21-day spray interval depending on disease pressure. Use a 14-day spray interval under normal to heavy disease pressure and a 21-day spray interval under light disease pressure. To optimize disease control, the lowest labeled rate of a spray surfactant may be tank-mixed		

A maximum of 17.1 fl oz (0.534 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Allow a minimum of 7 days from the last application before harvesting.

PROTHIOCONAZOLE 4L is a Group 3 fungicide. To limit the potential for development of disease resistance alternate every application of PROTHIOCONAZOLE with a non-Group 3 fungicide.

WHEAT (SPRING, DURUM AND WINTER), TRITICAL		
Disease Controlled	Rate of PROTHIOCONAZOLE 4L	
Fusarium Head Blight (Fusarium spp.)       5.0-5.7 fl oz/A         (Suppression Only)       (0.156-0.178 lbs ai/A) <b>APPLICATION TIMING:</b> The optimal time to apply PROTHIOCONAZOLE 4L is as a preventative foliar spray at early flower (Feekes Growth Stage 10.51). Spray equipment must be set to provide good coverage to wheat heads. For thorough coverage of the wheat head using ground application equipment, use forward and backward mounted nozzles or nozzles that have a two-directional spray. Operate nozzles within the spray pressure directions suggested by the manufacturer.		
Leaf and Stem Diseases:         Powdery Mildew (Blumeria graminis f. sp. tritici)         Rusts (Puccinia spp.)         Septoria Leaf and Glume Blotch (Septoria tritici)         Stagonospora Blotch (Stagonospora nodorum)         Tan Spot (Pyrenophora tritici-repentis)         APPLICATION TIMING: Apply PROTHIOCONAZOLE as a preventative foliar spray when the earliest disease symptoms appear on the leaves or stems. Wheat fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development.		
<ul> <li>PROTHIOCONAZOLE 4L may be applied by either ground, aerial or chemigation application equipment. For aerial application made prior to early flower (prior to Feekes Growth Stage 10.51), apply a minimum of 2 gpa spray solution. For aerial applications made at the early flower growth state or later, apply in a minimum of 5 gpa spray solution. Chemigation use is allowed only for applications made prior to early flower.</li> <li>USE RESTRICTIONS: Apply up to two (2) applications of PROTHIOCONAZOLE per year. Repeat applications using a 14-day spray interval if conditions remain favorable for continued or increasing disease development. For optimal disease control, the lowest labeled rate of a spray surfactant may be tank-mixed with PROTHIOCONAZOLE 4L.</li> </ul>		
A maximum of 9.37 fl oz (0.293 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per year. Do not apply within 30 days of harvest.		

NURSERY SEEDLINGS	
Shortleaf, loblolly, slash, longleaf and other pines and other conifers and hardwoods	
Disease Controlled Rate of PROTHIOCONAZOLE 4L	
Fustiform Rust ( <i>Cronartium quercum</i> f. sp. <i>Fusiforme</i> ) Pitch Canker ( <i>Fusarium</i> spp.) Rhizoconia Foliar Blight ( <i>Rhizoctonia</i> spp.)	5.0 fl oz/A (0.156 lbs ai/A)
APPLICATION TIMING: Foliar disease control: Apply PROTHIOCONAZOLE 4L preventatively or at the first sign	

of disease using ground equipment only. Repeat applications as needed using a 14- to 21-day spray interval depending on your region. Consult your local extension agent on locally recommended spray intervals. Use shorter intervals when conditions are favorable for severe disease pressure and/or when growing less disease resistant varieties. To optimize disease control, the lowest labeled rate of a spray surfactant may be tank-mixed with PROTHIOCONAZOLE 4L.

#### Do not use in forest planting or established woodlands.

The crop safety and mix compatibility on all tree species and in tank-mixes with other products (spray surfactants, fertilizers, insecticides, etc.) has not been confirmed. Albaugh, LLC recommends small scale testing with your planned use pattern. The user assumes all risks with the use of this product on trees.

**USE RESTRICTIONS:** A maximum of 25 fl oz (0.781 lbs prothioconazole) of PROTHIOCONAZOLE 4L may be applied per acre per crop year.

NURSERY SEEDS Shortleaf, loblolly, slash, longleaf and other pines and other conifers and hardwoods	
Disease Controlled Rate of PROTHIOCONAZOLE 4L	
Fusiform Rust ( <i>Cronartium quercum</i> f. sp. <i>Fusiforme</i> ) Pitch Canker ( <i>Fusarium</i> spp.)	10 fl oz per 50 lbs seed
<b>APPLICATION DIRECTIONS:</b> Apply specified dosage to seed in a commercial treater or other suitable tumbler apparatus. Allow to mix for at least 10 minutes. Thoroughly air dry before sowing.	
Do not use in forest planting or established woodlands.	

The crop safety and mix compatibility on all tree species and in tank-mixes with other products (spray surfactants, fertilizers, insecticides, etc.) has not been confirmed. Albaugh, LLC recommends small scale testing with your planned use pattern. The user assumes all risks with the use of this product on trees.

**USE RESTRICTIONS:** Do not use treated seed for food or feed purposes. Seed that has been treated with this product that is then packaged or bagged for future use must contain the labeling found in the SEED TAG LABELING section of this label.

# SEED TAG LABELING

The Federal Seed Act requires that the container of seed treated with Prothioconazole 4L must be labeled with the following statements:

- This seed has been treated with:
  - Prothioconazole 4L, a fungicide which contains 41% Prothioconazole.
- **DO NOT** use treated seed for food, feed or oil production.

In addition, the following statements are required on the container of seed treated with Prothioconazole 4L:

- Treated areas may be replanted with any crop specified on this label as soon as practical after last application. For crops not listed on this label, **DO NOT** plant back within 30 days of last application.
- Store treated seeds away from food and feedstuffs.
- DO NOT allow children, pets, or livestock to have access to treated seed.
- When opening this bag or loading/pouring the treated seed/seed-pieces, wear long-sleeved shirt, long pants, shoes, socks, and chemical-resistant gloves.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading and planting (such as in row ends).
- Dispose of all excess treated seed. Leftover treated seed may be buried away from water sources in accordance with local requirements.
- DO NOT contaminate water bodies when disposing of planting equipment wash waters.
- Treated at manufacturer's recommended rate.
- Treated seed must be adequately covered with soil at planting. Plant at a minimum depth of ½ inch.
- **DO NOT** plant treated seed by broadcasting to the soil surface. Ensure that all planted seeds are thoroughly incorporated by the planter during planting, additional incorporation may be required to thoroughly cover exposed seeds.
- Dispose of seed packaging or containers in accordance with local requirements. **DO NOT** use empty seed bags for any other purpose.
- To reduce seed dust which can drift onto blooming crops or weeds, ensure that planting equipment is functioning properly in accordance with manufacturer's recommendations. Surplus seed or empty seed containers must be stored or disposed according to local federal regulations.
- After the seeds have been planted, **DO NOT** enter or allow worker entry into the treated areas during the restricted-entry interval (REI) of 12 hours. Exception: Once the seeds are planted in soil or other

planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the treated seeds in the soil or with the planting media.

#### WARRANTY LIMITATIONS AND DISCLAIMER

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the Directions for Use when used under normal conditions. This is the only warranty made on this product. To the extent consistent with applicable law, no other express and no implied warranty of merchantability or fitness for a particular purpose is made outside of this label. Therefore, neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), under abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes, etc.) or under conditions not reasonably foreseeable to or beyond the control of seller.

When buyer or user suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), buyer or user must promptly notify seller, in writing, of any claims to be eligible to receive either remedy given below. To the extent consistent with applicable law, the exclusive remedy of the buyer or user and the limit of liability of seller will be one of the following, at the election of the seller:

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

To the extent consistent with applicable law, the seller will not be liable for consequential or incidental damages or losses.

The terms of this Warranty Limitations and Disclaimer cannot be varied by any written or verbal statements or agreements. Any employee or sales agent of the seller is not authorized to vary or exceed the terms of this Warranty Limitations and Disclaimer in any manner.

All product names, trademarks, and registered trademarks are the property of their respective owners.

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# LABEL HISTORY (Not included in final printed labeling)

File Name	Version Mark	Comment
045002-000ZZ.20210831.DRAFT	083121	Initial Submission
045002-000LA.20221020.DRAFT	102022	(e) Label Revisions
045002-000LA.20221123.DRAFT	112322	(e) Label Revisions
045002-000LA.20221128.DRAFT	112822	(e) Label Revisions