

#### OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

May 24, 2024

Rebecca Haynie Regulatory Product Manager Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419

Subject: Label Amendment - Registration Review Mitigation for Cyproconazole

Product Name: ALTO 100 SL FUNGICIDE EPA Registration Number: 100-1226 Application Date: 12/18/2020

Decision Number: 568968

#### Dear Rebecca Haynie:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Cyproconazole Interim Decision and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 the Federal Insecticide, Fungicide, and Rodenticide Act 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) list 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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must

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submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Carolyn Smith by phone at 202-566-2273, or via email at <a href="mailto:smith.carolyn@epa.gov">smith.carolyn@epa.gov</a>.

Sincerely,

Jolyn Pyrie

Jaclyn Pyne, Team Leader

Risk Management and Implementation Branch 3

Pesticide Re-Evaluation Division Office of Pesticide Programs

**ENCLOSURE:** Stamped label

#### Alto® 100SL Fungicide

### CYPROCONAZOLE GROUP 3 FUNGICIDE

Broad spectrum fungicide for control of the listed plant diseases

Active Ingredient:

Cyproconazole*	8.9%
Other Ingredients:	91.1%
Total:	100.0%

<sup>\*</sup>CAS No. 94361-06-5

Alto 100SL Fungicide is a soluble concentrate formulation which contains 0.83 lb ai cyproconazole per gallon.

#### KEEP OUT OF REACH OF CHILDREN.

### **CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1226

EPA Est. No.

gallons **Net Contents** 

ACCEPTED

05/24/2024

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1226

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## 1.0 FIRST AID

	FIRST AID				
If swallowed	Call a poison control center or doctor immediately for treatment advice.				
	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 on skin or	Take off contaminated clothing.				
clothing	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.				
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.				
	Call a poison control center or doctor for treatment advice.				
If inhaled	Move person to fresh air.				
	• If person is not breathing, call 911 or an ambulance, then give				
	artificial respiration, preferably by mouth-to-mouth, if possible.				
	Call a poison control center or doctor for treatment advice.				
	Have the product container or label with you when calling a poison control center or				
doctor, or going for treatment.					
SYNGENTA HOTLINE NUMBER					
For 24-Hour Medical Emergency Assistance (Human or Animal) or					
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),					
Call					
1-800-888-8372					

# 2.0 PRECAUTIONARY STATEMENTS

# 2.1 Hazards to Humans and Domestic Animals CAUTION

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

### 2.2 Personal Protective Equipment (PPE)

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate or butyl rubber ≥ 14 mils
- Shoes plus socks

#### 2.2.1 USER SAFETY REQUIREMENTS

Follow the 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.

#### 2.2.2 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 RECOMMENDATIONS**

#### **Users should:**

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

### 2.3 Environmental Hazards

For terrestrial uses: 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 disposing of equipment washwater or rinsate.

#### 2.3.1 GROUND WATER ADVISORY

This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Notify state and/or federal authorities and Syngenta immediately if you observe any adverse environmental effects due to use of this product.

### **DIRECTIONS FOR USE**

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

Alto 100SL Fungicide must be used only in accordance with directions on this label or in separately published EPA approved supplemental labeling for this product.

FAILURE TO FOLLOW THE USE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

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 and forests, 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), notification to workers, 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.

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 barrier laminate or butyl rubber ≥ 14 mils
- Shoes plus socks

### 3.0 PRODUCT INFORMATION

Alto 100SL Fungicide is a broad-spectrum fungicide for control of certain diseases in soybeans, corn, peanuts, and wheat. All applications must be made according to the use directions that follow.

### 3.1 Integrated Pest (Disease) Management

Alto 100SL Fungicide should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. See **Section 7.0** for cropspecific IPM recommendations. Consult your local agricultural authorities for additional IPM strategies established for your area. Alto 100SL Fungicide may be used in state agricultural extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

# 3.2 Resistance Management

CYPROCONAZOLE GROUP 3 FUNGICIDE

For resistance management, Alto 100SL Fungicide contains a Group 3 fungicide. Any fungal population may contain individuals naturally resistant to Alto 100SL Fungicide 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. Appropriate resistancemanagement strategies should be followed.

Alto 100SL Fungicide should not be alternated or tank mixed with any fungicide to which resistance has developed for the disease to be controlled.

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

- Rotate the use of Alto 100SL Fungicide 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 Syngenta Crop Protection at 1-866-796-4368. You can also contact your pesticide distributor or university extension specialist to report resistance.

# 4.0 APPLICATION DIRECTIONS

## **4**.1 Methods of Application

Alto 100SL Fungicide may be applied by ground, by air, or chemigation depending on the crop. Refer to **Section 7.0** for crop-specific instructions.

# **4**.2 Application Equipment

Alto 100SL Fungicide may be applied with all types of spray equipment commonly used for making ground and aerial applications. Do not apply Alto 100SL Fungicide through any type of ultra-low volume (ULV) spray system. Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease control.

#### 4.2.1 NOZZLES

- Equip sprayers with nozzles that provide accurate and uniform application.
- Be certain that nozzles are the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- Although Alto 100SL Fungicide is a soluble concentrate, it is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be 16-mesh or coarser.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required at the nozzles.
- Check nozzle manufacturer's recommendations.

#### 4.2.2 PUMP

- Use a pump with capacity to:
  - Maintain at least 35 40 psi at nozzles.
  - Provide sufficient agitation in tank to keep mixture in suspension (this requires recirculation of 10% of tank volume per minute).
- Use a jet agitator or liquid sparge tube for agitation.
- Do not air sparge.

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

# **4**.3 Application Volume and Spray Coverage

Apply Alto 100SL Fungicide in a minimum spray volume of 10 gallons per acre for ground application, and 2 gallons per acre for aerial application. Use sufficient water for adequate coverage and canopy penetration.

# **4**.4 Mixing Directions

- 1. Thoroughly clean spray equipment before using this product.
- 2. Prepare no more spray mixture than is required for the immediate operation.
- 3. Keep product container tightly closed when not in use.
- 4. Agitate the spray solution before and during application.
- 5. Do not let the spray mixture stand overnight in the spray tank.
- 6. Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

#### 4.4.1 ALTO 100SL FUNGICIDE ALONE

- 1. Add 1/2 to 2/3 of the required amount of water to the spray or mixing tank.
- 2. With the agitator running, add the Alto 100SL Fungicide to the tank.
- 3. Continue agitation while adding the remainder of the water.
- 4. Begin application of the spray solution after the Alto 100SL Fungicide has completely dispersed into the mix water.
- 5. Maintain agitation until all of the mixture has been sprayed.

#### 4.4.2 TANK-MIX PRECAUTIONS

- If using Alto 100SL Fungicide in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix product(s) label(s).
- Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.
- The safety of all potential tank mixes on all crops may not have been tested. Before
  applying any tank mixture not specifically recommended on this label, the safety of
  the target crop should be confirmed.

#### 4.4.3 TANK-MIX RESTRICTIONS

- Do not exceed any label dosage rates. Follow the most restrictive label precautions and limitations of any tank-mix partners.
- Do not mix this product with any product which prohibits such mixing.

#### 4.4.4 TANK-MIX COMPATIBILITY

Alto 100SL Fungicide is usually compatible with all tank-mix partners listed on this label. However, before tank mixing, use a jar test, as described below, to determine the physical compatibility of tank-mix partners.

**Compatibility Test**: Always check tank-mix compatibility with tank-mixed partners each time before use. Commercial application equipment may improve tank-mix compatibility in some instances.

The following test assumes a spray volume of 25 gal/A. For other spray volumes, make appropriate changes in the components. Check tank-mix compatibility using this procedure:

- 1. Add 1 pint of carrier (either the water or liquid fertilizer to be used in the spray operation) to each of two clear 1-quart jars with tight lids.
- 2. To **one** of the jars, add ¼ teaspoon or 1.2 milliliters of a commercially available tank-mix compatibility agent approved for this use (¼ teaspoon is equivalent to 2 pints per 100 gallons spray). Invert the jar, then shake or stir gently to ensure thorough mixing.
- 3. To **both** jars, add the appropriate amount of each tank-mix partner. If more than one tank-mix partner is to be used, add them separately and adhere to this mixing order: dry formulations (wettable powders or water dispersible granules) first, followed by liquid flowables, capsule suspensions, emulsifiable concentrates and finally adjuvants. After each addition, invert the jar, then shake or stir gently to thoroughly mix. The appropriate amount of each tank-mix partner for this test is as follows:

**Dry formulations:** Add the tank-mix ingredients in their relative proportions; e.g., for each pound to be applied per acre, add 1.5 level tsp to each jar.

**Liquid formulations:** Add the tank-mix ingredients in their relative proportions; e.g., for each pint to be applied per acre, add 0.5 tsp or 2.5 mL to each jar.

4. After adding all ingredients, put lids on and tighten, then invert each jar 10 times to fully mix. Let the mixtures stand for 15-30 minutes and then assess by looking for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if a compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry dry formulations in water before addition, or (B) add the compatibility agent directly into liquid formulations before addition to the tank mixture. If these procedures are followed but incompatibility is still observed, do not use the tank mixture.

#### 4.4.5 ALTO 100SL FUNGICIDE IN TANK MIXTURES

- 1. Add 1/2 to 2/3 of the required amount of water to the spray or mixing tank.
- 2. With the agitator running, add the tank-mix partner(s) into the tank.
- 3. In general, add tank-mix partner(s) in this order:
  - a. products packaged in water-soluble packaging
  - b. wettable powders
  - c. wettable granules (dry flowables)
  - d. liquid flowables
  - e. liquids
  - f. emulsifiable concentrates

- 4. Allow each product to completely dissolve and disperse into the mix water before adding the next one.
- 5. Continue agitation while adding the remainder of the water, additive as needed, and the Alto 100SL Fungicide to the spray tank.
- 6. Allow the Alto 100SL Fungicide to completely disperse.
- 7. Spray the mixture with the agitator running.

#### 4.4.6 SPRAY ADDITIVES

- When an adjuvant is to be used with this product, use one that meets the standards of the Council of Producers & Distributors of Agrotechnology (CPDA) adjuvant certification is recommended.
- Refer to individual crop use directions in **Section 7.0** for use of additives.

### **4.5** Application through Irrigation Systems (Chemigation)

• If you have questions about calibration, contact state extension service specialists, equipment manufacturers, or other experts.

#### 4.5.1 CHEMIGATION RESTRICTIONS

- Apply Alto 100SL Fungicide only to crops for which chemigation is specified on this label.
- Do not apply this product through any other type of irrigation system except as specified on this label.
- Do not apply when winds are greater than 10-15 mph to avoid drift or wind skips.
- Do not apply when wind speed favors drift beyond the area intended for treatment. Plant injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform treated water.
- Do not inject Alto 100SL Fungicide at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part Alto 100SL Fungicide. Alto 100SL Fungicide is corrosive to many seal materials. Leather seals are best; EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton™, Buna-N, Neoprene, or PVC seals.
- Allow sufficient time for the pesticide to be flushed through all lines and all nozzles before turning off irrigation water.
- 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.
- Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

#### 4.5.2 OPERATING INSTRUCTIONS FOR CHEMIGATION

- 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.

#### 4.5.3 SPECIFIC INSTRUCTIONS FOR PUBLIC WATER SYSTEMS

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ) back-flow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must 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.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, 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.

#### 4.5.4 APPLICATION DIRECTIONS FOR SPRINKLER IRRIGATION SYSTEMS

- Chemical tank and injector system should be thoroughly cleaned. Flush system with clean water.
- Apply this product through sprinkler irrigation systems including center pivot, lateral move, end tow, side [(wheel)] roll, traveler, big gun, solid set, or hand move irrigation systems.

- Apply with center pivot or continuous-move equipment distributing 1/2 acre-inch or less during treatment. In general, use the least amount of water required for proper distribution and coverage.
- If stationary systems (solid set, handlines, or wheel lines other than continuous-move) are used, this product should be injected into no more than the last 20-30 minutes of the set.
- Thorough coverage of foliage is required for good control.
- Good agitation should be maintained during the entire application period.

### **5.0 ROTATIONAL CROP RESTRICTIONS**

The following crops may be planted at the specified interval following application of Alto 100SL Fungicide:

Crop	Plant-Back Interval
Soybeans, corn, peanuts or wheat	immediately, if crop is lost
Cereal grains (other than wheat), cotton	180 days
All other crops (including leafy vegetables)	270 days

## 6.0 RESTRICTIONS AND PRECAUTIONS

### **6.1** Use Restrictions

• Do not use in nurseries or greenhouses.

### **6.2** Use Precautions

- Higher rates in the specified rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, highly susceptible varieties, or when environmental conditions are conducive to disease.
- Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if the maximum amount of product has been applied.
- The active ingredient in this product may have effects on federally listed threatened and endangered species or critical habitat in some counties. When using this product, you must follow the measures contained in the county bulletin for the county in which you are applying the pesticide. Bulletins may be available from local pesticide dealers, extension offices, or state pesticide agencies.

### 6.3 Spray Drift Advisories

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

#### 6.3.1 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.

#### 6.3.2 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.
- Nozzle Type Use a spray nozzle that is designed for the intended application.
   Consider using nozzles designed to reduce drift.

#### 6.3.3 CONTROLLING DROPLET SIZE – AIRCRAFT

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

#### 6.3.4 BOOM HEIGHT – GROUNDBOOM

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

#### 6.3.5 RELEASE HEIGHT – AIRCRAFT

Higher release heights increase the potential for spray drift.

#### 6.3.6 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.

#### 6.3.7 TEMPERATURE AND HUMIDITY

 When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

#### 6.3.8 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. Avoid applications during temperature inversions.

#### 6.3.9 WIND

- Drift potential 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.

fungicides such as

(thiophanate-methyl).

Topsin® M

# 7.0 CROP USE DIRECTIONS

### 7.1 Cereals

1.1 Cereais	1.1 Cerears				
Crops (Including all cultivars, varieties, and/or hybrids of these)					
Triticale Wheat					
Target Pest	Rate (fl oz/A)	Application Timing	Use Directions		
Early season suppression of: Powdery mildew (Blumeria spp., Erysiphe spp.) Leaf Blight (Septoria tritici) Glume Blotch (Stagonospora nordorum) Tan spot (Pyrenophora tritici-repentis)	1.5–5.5	Apply in the spring at approximately Feekes Stage 5.	Apply by ground, air or chemigation.		
Control of Leaf Diseases: Rust (Puccinia spp.) Powdery mildew (Blumeria spp., Erysiphe spp.) Leaf Blight (Septoria tritici) Glume Blotch	3.0–5.5	Apply between Feekes Stage 8 and 10.5.1.  Apply at tillering, but before elongation has occurred.	Apply by ground, air or chemigation.  If disease pressure is low, apply 3 fl oz/acre.		
(Stagonospora nordorum) Tan spot (Pyrenophora tritici-repentis) Helminthosporium leaf blight (Drechslera tritici-repentis) Spot Blotch			For <b>Foot Rot</b> control, apply Alto 100SL Fungicide in combination with other EPA-registered		

#### **Resistance Management:**

(Pseudocercosporella spp.)

(Bipolaris sorokiniana)

• Refer to Section 3.2.

#### **Precautions:**

Foot Rot

For leaf diseases, protecting the flag leaf is important for maximizing the potential yield.

- 1) Refer to **Section 6.1** for additional product use restrictions.
- 2) **Maximum Single Application Rate:** 5.5 fl oz/A/application (0.036 lb ai/A of cyproconazole containing products)
- 3) Minimum Application Interval: 14 days
- 4) Maximum Annual Rate: 5.5 fl oz/A/year (0.036 lb ai/A/year of cyproconazole-containing products)
- 5) Pre-Harvest Interval (PHI):
  - a. Forage and Hay: 21 days
  - b. Wheat (Grain and Straw): 30 days

### **7**.2 Corn

Crops (Including all cultivars, varieties, and/or hybrids of these)				
Corn, field	Corn, seed			
Target Pest	Rate (fl oz/A)	Application Timing	Use Directions	
Northern corn leaf blight (Setosphaeria turcica)	2.75–5.5	Apply when disease first appears.	Apply by ground, air or chemigation	
Northern corn leaf spot (Cochliobolus carbonum)		A second application may be made 7–14 days later.	Use the low rate when disease pressure is low.	
Southern corn leaf blight (Cochliobolus heterostrophus) [also known as Helminthosporium leaf blights (H. maydis, H. turcicum, H. carbonum)]			Apply the high specified rate under heavy disease pressure or if conditions are favorable for disease.	
Rusts (common and Southern) ( <i>Puccinia</i> spp.)				
Gray leafspot (Cercospora zeae-maydis)				
Eye spot				

# (Aureobasidium zeae) Resistance Management:

• Refer to **Section 3.2**.

- 1. Refer to **Section 6.1** for additional product use restrictions.
- 2. **Maximum Single Application Rate:** 5.5 fl oz/A/application (0.036 lb ai/A of cyproconazole-containing products)
- 3. Minimum Application Interval: 7 days
- 4. **Maximum Annual Rate:** 5.5 fl oz/A/year (0.036 lb ai/A/year of cyproconazole-containing products)
- 5. DO NOT apply more than 2 applications per year.
- 6. Pre-Harvest Interval (PHI):
  - **a. Grain and Stover:** 30 days
  - b. Forage and Silage: 21 days

### 7.3 Peanut

#### Crops (Including all cultivars, varieties, and/or hybrids of these)

#### Peanu

1 Gariut			
Target Pest	Rate (fl oz/A)	Application Timing	Use Directions
Early leafspot (Cercospora arachidicola)	5.5	A foliar disease control program should start 30 to 45 days after planting or at	Apply by ground, air or chemigation.
Late leafspot (Cercosporidium personatum)		the first appearance of disease.	For <b>foliar disease control</b> , apply up to two times as part of a season long disease
Rust ( <i>Puccinia arachidis</i> )		For early season control of Southern stem blight,	management program.
Web blotch ( <i>Phoma arachidicola</i> )		apply Alto100SL Fungicide or Alto100SL Fungicide + Abound® Flowable Fungicide (azoxystrobin), in	For increased control of  Southern stem blight, tank mix  5.5 fl oz/A with products intended for S. rolfsii at approximately 60
Southern stem blight (Sclerotium rolfsii)		a proportional banded spray 7-28 days after planting.	and 90 days after planting.
Limb Rot (Rhizoctonia solani)			

#### **Resistance Management:**

• Refer to Section 3.2.

- 1) Refer to **Section 6.1** for additional product use restrictions.
- 2) **Maximum Single Application Rate:** 5.5 fl oz/A/application (0.036 lb ai/A of cyproconazole-containing products)
- 3) Minimum Application Interval: 28 days
- 4) Maximum Annual Rate: 11 fl oz/A/year (0.072 lb ai/A/year of cyproconazole-containing products)
- 5) Pre-Harvest Interval (PHI): 30 days
- 6) DO NOT apply more than 2 applications per year.

# 7.4 Soybean

Crops (Including all cultivars, varieties, and/or hybrids of these)					
Soybean					
Target Pest	Rate (fl oz/A)	Application Timing	Use Directions		
Rust ( <i>Phakopsora</i> spp.)	2.75–5.5	For maximum performance, apply prior to disease development.	Applications may be made by ground, air or chemigation.		
Aerial blight ( <i>Rhizoctonia solani</i> )	4.0-5.5	For control of Rust, depending on the conditions, apply at R1 (beginning	A spreading/penetrator type adjuvant is recommended when used solo or in tank mix.		
Frogeye leafspot (Cercospora sojina)		flowering, approximately 50 days after planting) up to the R6 stage (seed fully	Coverage and penetration are important for best results. Use sufficient water volume to provide		
Anthracnose (Colletotrichum truncatum)		developed). Repeat at 14- to 28-day interval if conditions persist for rust development.	thorough and uniform plant coverage.		
Alternaria leaf spot (Alternaria spp.)			For control of Rust while plants are in vegetative stages of growth, use the 2.75 oz/A		
Brown spot (Septoria glycines)			rate. For rust control when the plants are in reproductive stages of growth use the 5.5 oz/A rate.		
Cercospora blight and leaf spot (Cercospora kikuchii)			For all other diseases, apply a minimum of 4 fl oz/A based on		
Pod and Stem blight (Diaporthe phaseolorum)			conditions and disease pressure.		
			Tank mixes with a strobilurin fungicide such as Quadris will enhance performance on these diseases.		

#### **Resistance Management:**

- Refer to Section 3.2.
- Do not alternate or tank mix with fungicides to which resistance has developed in the pathogen population.

- 1) Refer to **Section 6.1** for additional product use restrictions.
- 2) **Maximum Single Application Rate:** 5.5 fl oz/A/application (0.036 lb ai/A of cyproconazole-containing products)
- 3) Minimum Application Interval: 14 days
- 4) **Maximum Annual Rate:** 11 fl oz/A/year (0.072 lb ai/A/year of cyproconazole-containing products)
- 5) **DO NOT** use soybean forage or hay as livestock feed if making more than one application at 5.5 fl oz product/A.
- 6) DO NOT graze forage within 14 days of an application.
- 7) Pre-Harvest Interval (PHI):
  - a. Soybeans (bean): 30 days

### 8.0 STORAGE AND DISPOSAL

#### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

#### PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative of the nearest EPA regional office for guidance.

#### **CONTAINER HANDLING (less than or equal to 5 gallons)**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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 and 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 incineration, or by other procedures approved by state and local authorities.

#### **CONTAINER HANDLING (greater than 5 gallons)**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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

# 9.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

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SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

# 10.0 [OPTIONAL TABLE:] USE SUMMARY TABLE

Crop or Crop Group or Subgroup, with examples	Maximum Single Application Rate (fl oz/A)	Maximum Single Application Rate (lb ai/A)	Minimum Application Interval (days)	Pre-Harvest Interval - PHI (days)	Maximum Annual Rate (fl oz/A)	Maximum Annual Rate (lb ai/A)
Cereals Triticale and wheat	5.5	0.036	14	Forage/Hay: 21 Wheat (Grain/Straw): 30	5.5	0.036
<b>Corn</b> Field and seed	5.5	0.036	7	Forage/Silage: 21 Grain/Stover: 30	5.5	0.036
Peanut	5.5	0.036	28	30	11	0.072
Soybean	5.5	0.036	14	Beans: 30	11	0.072

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Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

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