

#### OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

December 1, 2023

Ricky Kyaw Regulatory Product Manager Syngenta Crop Protection, LLC P. O. Box 18300 Greensboro, NC 27419

Subject: Label Amendment - Registration Review Mitigation for Acibenzolar-S-methyl,

Azoxystrobin

Product Name: HERITAGE ACTION SC EPA Registration Number: 100-1639 Application Dates: 2/1/2019, 5/17/2019 Decision Numbers: 592285,592284

#### Dear Ricky Kyaw:

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 Acibenzolar-S-methyl and Azoxystrobin Interim Decisions, 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. You must submit one copy of the final printed labeling

Page 2 of 2 EPA Reg. No. 100-1639 Decision No. 592285,592284

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 DeMariah Koger by phone at (202)-566-2288, or via email at Koger.demariah@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division

Office of Pesticide Programs

ENCLOSURE: Stamped label

## ACCEPTED

Dec 01, 2023

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1639

(Master)

AZOXYSTROBIN	GROUP	11	FUNGICIDE
ACIBENZOLAR-S-METHYL	GROUP	P01	FUNGICIDE

### Heritage<sup>®</sup> Action™ SC

#### **Fungicide**

Broad-spectrum, systemic fungicide for the prevention and control of turf diseases on golf courses, sod farms, institutional, commercial and industrial buildings, and collegiate and professional athletic fields

Active Ingredient:

Azoxystrobin <sup>1</sup>	22.90%
Acibenzolar-S-methyl <sup>2</sup>	
Other Ingredients:	76.56%
Total:	100.0%

<sup>&</sup>lt;sup>1</sup> CAS No. 131860-33-8

Heritage Action SC is formulated as a suspension concentrate and contains 2.08 lb azoxystrobin and 0.049 lb acibenzolar-S-methyl per gallon.

#### KEEP OUT OF REACH OF CHILDREN

## CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use in booklet.

Read entire label carefully and use only as directed.

EPA Reg. No. 100-1639 EPA Est.

**Net Contents** 

<sup>&</sup>lt;sup>2</sup> CAS No. 135158-54-2

#### **TABLE OF CONTENTS**

#### 1.0 FIRST AID

#### 2.0 PRECAUTIONARY STATEMENTS

- 2.1 Hazards to Humans and Domestic Animals
- 2.2 Personal Protective Equipment (PPE)
  - 2.2.1 User Safety Requirements
  - 2.2.2 Engineering Controls
  - 2.2.3 User Safety Recommendations
- 2.3 Environmental Hazards
  - 2.3.1 **Groundwater Advisory**
  - 2.3.2 Surface Water Advisory

## **DIRECTIONS FOR USE**

#### 3.0 PRODUCT INFORMATION

- 3.1 Integrated Pest Management (IPM)
- 3.2 Resistance Management
- 3.3 Plant Sensitivity

#### 4.0 APPLICATION DIRECTIONS

- 4.1 Methods of Application
- 4.2 Application Equipment
- 4.3 Application Volume and Spray Coverage
- 4.4 Mixing Directions
  - 4.4.1 Heritage Action SC Alone
  - 4.4.2 Tank-Mix Compatibility
  - 4.4.3 Heritage Action SC in Tank Mixtures

#### 5.0 RESTRICTIONS AND PRECAUTIONS

- 5.1 Use Restrictions
- 5.2 Use Precautions
- 5.3 **Spray Drift Management**
- **6.0 USE DIRECTIONS**
- 7.0 STORAGE AND DISPOSAL
- 8.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

## 1.0 FIRST AID

FIRST AID						
If swallowed	Call a poison control center or doctor immediately for treatment advice.					
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>					
<ul> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> </ul>						
	Do not give anything to an unconscious person.					
Have the prod	duct container or label with you when calling a poison control center or					
	doctor or going for treatment.					
	HOTH ME MUMBER					

#### 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/PRECAUCIÓN**

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

## 2.2 Personal Protective Equipment (PPE)

#### All handlers must wear:

- Long-sleeved Shirt and Long Pants
- Socks and Shoes
- Chemical-resistant Gloves made of: Barrier Laminate, Butyl Rubber ≥14 mils, Neoprene Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Polyvinyl Chloride (PVC) ≥14 mils, or Viton™ ≥14 mils

## 2.2.1 User Safety Requirements

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

## 2.2.2 Engineering Controls

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

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down. Do not allow contact between contaminated sprayer parts and unprotected skin. Ensure sprayer is washed down daily.

## 2.2.3 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

This product is toxic to fish and aquatic invertebrates. Azoxystrobin can be persistent for several months or longer. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash water or rinsate.

## 2.3.1 **Groundwater Advisory**

Azoxystrobin and a degradate of azoxystrobin are known to leach through soil to groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## 2.3.2 Surface Water Advisory

This product may impact surface water quality due to run-off of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having a high potential for reaching surface water via run-off 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 azoxystrobin and a degradate of azoxystrobin from run-off water and sediment. Run-off of this product also will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

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.

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.

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

#### AGRICULTURAL USES

Broad-spectrum, systemic fungicide for the prevention and control of turf diseases on sod farms.

#### **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), 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:

- Long-sleeved Shirt and Long Pants
- Socks and Shoes
- Chemical-resistant Gloves made of: Barrier Laminate, Butyl Rubber ≥14 mils,
- Neoprene Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Polyvinyl Chloride (PVC)
   ≥14 mils, or Viton ≥14 mils

#### **NON-AGRICULTURAL USES**

Broad-spectrum, systemic fungicide for the prevention and control of turf diseases on golf courses, institutional, commercial and industrial buildings, and collegiate and professional athletic fields.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides, 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Turf grasses on golf courses are not within the scope of the Worker Protection Standard. The area being treated must be vacated by unprotected persons.

Do not treat areas while unprotected humans or domestic animals are present in the treatment areas. Because certain states may require more restrictive reentry intervals, consult your State Department of Agriculture for further information.

Do not enter or allow others to enter the treated area until sprays have dried.

## 3.0 PRODUCT INFORMATION

Heritage Action SC couples a broad-spectrum, systemic fungicide with a systemic compound used for control or suppression of disease through induction of host plant resistance. Heritage (azoxystrobin) is a broad-spectrum, systemic fungicide that prevents and controls pathogens causing foliar, stem, and root diseases, including leaf and stem blights, leaf spots, patch diseases, mildew, molds and rusts of turfgrass. Action (acibenzolar-S-methyl) exhibits an additional unique mode of action, beyond azoxystrobin alone, which mimics the natural systemic activated resistance (SAR) response found in most plant species. This SAR response does not involve direct activity against the target pathogens.

Heritage Action SC is a member of Syngenta's Plant Performance™ product line that may improve plant vigor and quality. The additional benefits are due to positive effects on plant physiology, which can vary according to plant species and growing environment.

Heritage Action SC fungicide may be used to control these diseases on golf courses, sod farms, institutional, public, commercial and industrial buildings, and collegiate and professional athletic fields. Heritage Action SC may be applied as a foliar spray in alternating spray programs or in tank mixes with other registered turf-protection products.

## 3.1 Integrated Pest Management (IPM)

Sound turf management resulting in healthy, vigorous turf is the foundation of a good IPM program. Integrate cultural practices such as proper choice of turf variety, nutrient management, proper cutting height, thatch management, and proper watering, drainage, and moisture stress management with the use of fungicides to increase turf vigor and reduce the susceptibility to disease. Immunoassay detection kits and extension service diagnostic services can assist in the early and accurate identification of causal organisms and corresponding selection of the proper fungicide when required.

## 3.2 Resistance Management

AZOXYSTROBIN	GROUP	11	FUNGICIDE
ACIBENZOLAR-S-METHYL	GROUP	P01	FUNGICIDE

For resistance management, please note that Heritage Action SC contains both Group 11/azoxystrobin and Group P01/acibenzolar-S-methyl fungicides. Any fungal populations may contain individuals naturally resistant to Heritage Action SC and other Group 11 or Group P01 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Follow appropriate resistance-management strategies.

Azoxystrobin belongs to the strobilurin class of chemistry which disrupts cellular respiration and energy generation. Acibenzolar-S-methyl is a selective, non-pesticidal, systemic compound which induces host plant resistance.

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

- Rotate the use of Heritage Action SC or other Group 11 or Group P01 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 crop and pathogens.
- For further information or to report suspected resistance contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report resistance.

Syngenta encourages responsible product stewardship to ensure effective long-term control of the fungal diseases on this label.

Do not apply more than two sequential Heritage Action SC applications for Gray leaf spot and Pythium disease control. For all other diseases when Gray leaf spot and Pythium diseases are not present, do not apply more than three sequential applications of Heritage Action SC.

## 3.3 Plant Sensitivity

Heritage Action SC is extremely phytotoxic to certain apple and crabapple varieties. Extreme care must be used to prevent injury to apple and crabapple trees. Even trace amounts can cause unacceptable phytotoxicity. **DO NOT** spray Heritage Action SC where spray drift may reach apple or crabapple trees.

Heritage Action SC has demonstrated some phytotoxic effects when mixed with products that are formulated as EC's. These effects are enhanced if applications are made under cool, cloudy conditions and these conditions remain for several days following application. In addition, adjuvants that contain some form of silicone have also contributed to phytotoxicity.

## 4.0 APPLICATION DIRECTIONS

## 4.1 Methods of Application

Heritage Action SC can be used effectively in dilute sprays.

## 4.2 Application Equipment

Heritage Action SC may be applied with most types of spray equipment commonly used for ground applications on turf.

**DO NOT** apply with backpack sprayers or manually pressurized handwands.

## 4.3 Application Volume and Spray Coverage

Thorough, uniform coverage is essential for disease control.

Use a pump with capacity to maintain the correct rated pressure for the nozzles selected. Maintain sufficient agitation to keep mixture in suspension. Use a jet agitator, liquid sparge tube, or mechanical paddle for agitation.

Use screens to prevent nozzles from clogging. Use 50-mesh or coarser screens placed after the tank and before the nozzles. Check nozzle manufacturer's specifications. For more information on spray equipment and calibration, consult sprayer manufacturers and state specifications.

Apply Heritage Action SC in sufficient water to obtain adequate uniform coverage of the turf. Apply in a minimum spray volume of 40 gal of water per acre on fairways and 90 gal of water per acre on tees and greens.

## 4.4 Mixing Directions

Slowly invert container several times to assure uniform mixture.

Thoroughly clean spray equipment before using this product to prevent possible crop injury or nozzle clogging problems from spray tank contamination. To prepare spray solution, partially fill the spray tank with clean water and begin agitation. Add the specified amount of Heritage Action SC to the tank allowing adequate time for good dispersion and then add an adjuvant if specified. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the spraying operation. Do not let the spray solution stand overnight in the spray tank. Do not prepare more spray solution than is needed for the immediate spray operation. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

## 4.4.1 Heritage Action SC Alone

Fill the spray tank with ½ of the required amount of water with the agitator running, add Heritage Action SC to the spray tank. Continue agitation while adding the remainder of the water. Begin application of the solution after Heritage Action SC has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

## 4.4.2 Tank-Mix Compatibility

Heritage Action SC is compatible with many commonly used fungicides, liquid fertilizers, herbicides, insecticides and biological control products. Consult compatibility charts or your local or state agricultural or turf authorities for compatibility information. Do not combine Heritage Action SC in the spray tank with any product unless compatibility charts or your own prior use has shown that the combination is physically compatible, effective and non-phytotoxic under your conditions of use. If physical compatibility is unknown, follow this testing procedure: pour the specified proportions of the products

into a suitable container of water, mix thoroughly and allow it to stand for at least 20 minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible.

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.

## 4.4.3 Heritage Action SC in Tank Mixtures

To prepare spray solution, add ½ of the required amount of water to the mix/ sprayer tank. Start the agitator running before adding any tank mix partners. In general, add tank mix partners in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables (such as Heritage Action SC), liquids, and emulsifiable concentrates. Always allow each tank mix partner to become fully 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.

When using Heritage Action SC in tank mixtures, add all products in water-soluble packaging to the tank before any other tank mix partner, including Heritage Action SC. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

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.

## 5.0 RESTRICTIONS AND PRECAUTIONS

## 5.1 Use Restrictions

- DO NOT apply more than 5.0 lb azoxystrobin active ingredient/Acre/calendar year with any combination of products (equal to 308 fl oz of Heritage Action SC/Acre/calendar year).
- DO NOT apply more than 0.12 lb acibenzolar-S-methyl active ingredient/Acre/calendar year with Heritage Action SC (equal to 308 fl oz of Heritage Action SC/Acre/calendar year).
- **DO NOT** apply more than 0.41 lb acibenzolar-S-methyl active ingredient/Acre/calendar year with any combination of products.
- DO NOT apply to residential lawns.
- DO NOT apply by air.

- **DO NOT** graze or feed clippings from treated turf areas to animals.
- DO NOT apply with backpack sprayers or manually pressurized handwands.

## 5.2 Use Precautions

- Heritage Action SC has demonstrated some phytotoxic effects when mixed with products that are formulated as ECs. These effects are enhanced if applications are made under cool, cloudy conditions and these conditions remain for several days following application. In addition, adjuvants that contain some form of silicone have also contributed to phytotoxicity.
- To ensure optimum control of diseases:
  - Use Heritage Action SC in a Preventative Disease Control Program.
  - Use Heritage Action SC in conjunction with turf management practices that promote good plant health and optimum disease control.
  - Before use of any fungicide, proper identification of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease organism is essential to determine the best control measures.
  - Evaluate spray additives prior to use. Label directions are based on data obtained with no additives. When an adjuvant is to be used with this product, use an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program.
  - Apply in sufficient water to ensure thorough coverage.
  - Apply after mowing or allow sprayed area to completely dry before mowing.
  - Allow sprayed area to completely dry before irrigation.

## 5.3 Spray Drift Management

## SPRAY DRIFT Groundboom Applications

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

Azoxystrobin can affect non-target plant species outside the treatment area. To limit adverse effects to non-target plants, the applicator must avoid making applications when wind can facilitate off-site movement of azoxystrobin in the direction of areas such as forested areas, riparian areas, wetlands, and areas that serve as habitat for desirable and protected animal species.

#### SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

## **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce drift potential 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 the applications are made improperly or under unfavorable environmental conditions. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage.

#### **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..

#### **BOOM HEIGHT - Ground Boom**

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

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with 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. Avoid applications during temperature inversions.

#### **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.

## 6.0 USE DIRECTIONS

For optimum disease control, apply Heritage Action SC preventatively. Begin applications when conditions are favorable for disease infection prior to the appearance of disease symptoms. Heritage Action SC mimics the SAR response in plants. Maximum disease control is normally obtained 4 days after a Heritage Action SC application. Apply Heritage Action SC at rates and timings given on this label. Use the shortest specified application interval and/or the highest specified rate under conditions of heavy infection pressure, highly susceptible varieties, or when environmental conditions conducive to disease exist. Repeat applications at specified intervals for as long as required.

Mix Heritage Action SC with the required amount of water, and apply as a dilute spray in 2-4 gallons of water per 1,000 square feet (87-174 gallons per acre). Proper adjustments and calibration of spraying equipment is essential for best disease control. For spot treatments, use 0.4 fl oz of Heritage Action SC per 1-2 gallons of water.

#### For use with soil injection applications:

Heritage Action SC may be applied through a liquid fungicide injector for the control of ectotrophic root diseases, such as summer patch and take-all patch. Use Heritage Action SC only in liquid injection equipment specifically designated for pesticide use.

Apply Heritage Action SC at 0.4-0.78 fl oz /1,000 sq ft. Use a spray carrier volume of 30-150 gallons of water per 1,000 sq ft. Use an injection hole spacing of 1 inch by 1 inch for optimum control. Use a one-inch depth for optimum results. Do not use an injection depth greater than 2 inches. For application timing, follow disease control strategies used for normal broadcast spray programs.

## For use in the establishment of turfgrass from seed or in over-seeding of dormant turfgrass:

Heritage Action SC may be used for control of certain turfgrass diseases associated with turfgrass establishment from seed. Heritage Action SC may also be used during over-seeding of dormant turfgrass.

Heritage Action SC may be safely applied before or after seeding or at seedling germination and emergence to ryegrass, bentgrass, bluegrass, and fescue turfgrass types. Optimum application timing is during seeding.

TABLE 1: Use Rates and Timings for Listed Turfgrass Diseases.					
Refer to Section 3.2 for Res	Refer to Section 3.2 for Resistance Management.				
Target Diseases	Use Rate (fl oz product /1000 sq ft)	Application Interval (days)	Application Timing		
Anthracnose (Colletotrichum graminicola)	0.4-0.8	14-28	Use preventatively.		
Bermudagrass Decline (Gaeumannomyces graminis var. graminis)	0.8	28	Use preventatively.		
Brown Patch (Rhizoctonia solani)	0.4-0.8	14-28	Apply when conditions are favorable for disease development.		
Brown Ring Patch (Waitea circinata var. circinata)	0.4-0.8	14-28	Apply when conditions are favorable for disease development.		
Yellow Patch (Rhizoctonia cerealis)	0.4-0.8	28	Make one or two applications in fall or when conditions are favorable for disease development.		
Fairy Ring (Lycoperdo, Arachnion, Bovista, Vascellum, and Agrocybe species)	0.4-0.8	14-28	Apply preventatively or as soon as possible after fairy ring symptoms develop. Apply only in 4 gallons water/1,000 square feet (174 gallons /Acre). Add the specified rate of a wetting agent to the final spray. Fairy ring symptoms may take 2 to 3 weeks to disappear following curative applications and reapplication may be required in some cases. Severely damaged or thin turf may require reseeding.		
Fusarium Patch ( <i>Microdochium nivale</i> )	0.4-0.8	14-28	Use preventatively.		
Gray Leaf Spot ( <i>Pyricularia grisea</i> )	0.4-0.8	14-28	Begin applications before disease is present and continue applications while conditions are favorable for disease development.		
Gray Snow Mold Typhula blight ( <i>Typhula incarnata</i> , <i>T. ishikariensis</i> )	0.8	10–28	Make a single application of 1.4 fl oz product/1,000 square feet, or two applications of 0.8 fl oz product/1,000 square feet spaced 10–28 days apart in late fall just before snow cover. Tank-mixing with another snow mold fungicide, such as chlorothalonil (e.g., Daconil®-branded products), may enhance control under severe disease pressure.		

TABLE 1: Use Rates and Timings for Listed Turfgrass Diseases.					
Refer to Section 3.2 for Res	Refer to Section 3.2 for Resistance Management.				
Target Diseases	Use Rate (fl oz product /1000 sq ft)	Application Interval (days)	Application Timing		
Leaf Rust Stem Rust Stripe Rust ( <i>Puccinia</i> species)	0.4-0.8	14–28	Begin applications when conditions are favorable for disease infection, prior to disease symptom development.		
Leaf spot (Bipolaris species)	0.4-0.8	14–21	Apply when conditions are favorable for disease development.		
Melting Out (Drechslera poae)	0.4-0.8	14–21	Apply when conditions are favorable for disease development.		
Necrotic Ring Spot (Leptosphaeria korrae)	0.8	14–28	Apply when conditions are favorable for disease development.		
Pink Patch ( <i>Limonomyses</i> roseipellis)	0.4-0.8	14–28	Apply when conditions are favorable for disease development.		
Pink Snow Mold ( <i>Microdochium nivale</i> )	0.8	10–28	Make a single application of 1.4 fl oz product/1,000 square feet, or two applications of 0.8 fl oz product/1,000 square feet spaced 10–28 days apart in late fall just before snow cover. Tank-mixing with another snow mold fungicide, such as chlorothalonil (e.g., Daconil- branded products), may enhance control under severe disease pressure.		
Powdery Mildew (Erysiphe graminis)	0.4-0.8	14–28	Begin applications when conditions are favorable for disease infection, prior to disease symptom development.		
Pythium Blight Pythium Root Rot (Pythium species)	0.4-0.8	10–14	Use preventatively. Begin applications before disease is present. During periods of prolonged favorable conditions, treat on the 10 day application interval. For use on newly seeded as well as established turf.		
Pythium Root Dysfunction ( <i>Pythium volutum</i> )	0.8	21–28	Apply preventatively when mean daily soil temperatures are between 55 F and 70 F. Irrigate with 0.1 to 0.2 inches within 24 hours after application to facilitate movement into the root zone.		
Red Thread (Laetisaria fuciformis)	0.4-0.8	14–28	Apply when conditions are favorable for disease development.		

**TABLE 1: Use Rates and Timings for Listed Turfgrass Diseases.** 

Refer to **Section 3.2** for **Resistance Management**.

Target Diseases	Use Rate (fl oz product /1000 sq ft)	Application Interval (days)	Application Timing
Rhizoctonia Large Patch/Zoysia Patch ( <i>Rhizoctonia solani</i> )	0.4-0.8	14–28	Make one or two applications in fall or when conditions are favorable for disease development. Spring applications may also be required in some locations or when disease pressure is high.
Leaf and Sheath Spot (Rhizoctonia zeae)	0.4-0.8	14–28	Apply when disease conditions are favorable for disease development.
Southern Blight (Sclerotium rolfsii)	0.4-0.8	14–28	Apply when conditions are favorable for disease development.
Spring Dead Spot (Ophiospharella korrae, O. herpotricha, and O. narmari)	0.4-0.8	14–28	Apply 1 or 2 applications approximately one month prior to Bermuda grass dormancy. Irrigate treated area with 1/8–1/4 inch of water immediately after application if possible. Reapply 14–28 days later.
Summer Patch (Magnaporthe poae)	0.4-0.8	14–28	Apply when conditions are favorable for disease development.
Take-all patch (Gaeumannomyces graminis var. avenae)	0.8	28	Begin applications when conditions are favorable for disease infection, prior to disease symptom development. Make two applications, 28 days apart in the spring and two applications 28 days apart in the fall.
Dollar Spot Suppression (Sclerotina homoeocarpa)	0.4-0.8	14–28	Heritage Action SC will suppress dollar spot. For effective control, always mix Heritage Action SC with chlorothalonil (e.g., Daconil- branded products), fluazinam (e.g., Secure®-branded products) or another Dollar Spot control fungicide
Bacterial Wilt Suppression (Acidovorax species) (Xanthomonas species)	0.4-0.8	14–28	For suppression of bacterial wilt on bent and Poa greens, apply Heritage Action SC in a yearly program with chlorothalonil and acibenzolar-Smethyl (e.g., Daconil Action).

## **USE RESTRICTIONS**

- 1) **Maximum Single Application Rate:** 35 fl oz product/Acre (0.8 fl oz product/1,000 square feet) equivalent to 0.01 lb acibenzolar-s-methyl per acre and 0.57 lb azoxystrobin per acre.
- 2) Maximum Annual Rate: 308 fl oz product/Acre/year (7 fl oz product/1,000 square feet/year)
- a. Do not apply more than 5.0 lb ai/Acre/calendar year of azoxystrobin with any combination of products.

## **TABLE 1: Use Rates and Timings for Listed Turfgrass Diseases.**

Refer to Section 3.2 for Resistance Management.

	Use Rate	Application	
Target Diseases	(fl oz product	<u>Interval</u>	Application Timing
	/1000 sq ft)	(days)	

b. Do not apply more than 0.40 lb ai/Acre/calendar year of acibenzolar-S-methyl with any combination of products.

**TABLE 2: Heritage Action SC Rate Conversion Chart.** 

Use Rate (fl oz product per 1,000 sq ft)	Pints Product per Acre	Gallons Product per Acre	Pounds Azoxystrobin per Acre	Pounds Acibenzolar-S-methyl per Acre
0.4	1.09	0.136	0.28	0.0067
0.8	2.18	0.272	0.57	0.013

TABLE 3: Amount of Heritage Action SC to Add to 100 Gallon Spray Tank.

Use Rate		Dilution Rate (fl oz product/100 gal)		
fl oz product per 1,000 sq ft	fl oz product per Acre	2 gal 3 gal 4 gal per 1,000 sq ft per 1,000 sq ft (87 gal/Acre) (131 gal/Acre) (174 gal/Acre		
0.4	17.4	20.0	13.3	10.0
0.8	34.8	40.0	26.6	20.0

## 7.0 STORAGE AND DISPOSAL

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Store in original container, in a secured, cool, dry place separate from food and feed. Do not store near heat or open flame.

#### **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at 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 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. 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)]

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. Fill the container ½ 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. 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 recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. 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 IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

# 8.0 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 the 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.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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.

Banner MAXX®, Concert®, Daconil®, Daconil Ultrex®, Daconil WeatherStik®, Daconil Zn®, Headway®, Heritage®, Instrata®, Medallion®, Plant Performance™, Renown®, Subdue Maxx®, Velista®, the ALLIANCE FRAME, the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Action™ is a trademark of Wilbur-Ellis Company LLC.

Viton™ is a trademark of The Chemours Company FC, LLC.

©20XX Syngenta

For non-emergency (e.g., current product information) call Syngenta Crop Protection at 1-800-334-9481

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

Heritage Action SC 1639 MAS 0918 AMEND-B 0119-CL – jd-6/15/23 000100-01639.20190131B.HERITAGE ACTION SC.AMEND.JAN2019-CL