

# Endorse<sup>®</sup>



STATE OF HAWAII  
Department of Agriculture

GROUP

19

FUNGICIDE

ACCEPTED

LICENSE NO.

8143.6

# Wettable Powder Fungicide

**For use on Turf**

**Prohibited for any Food or Feed Use**

**ACTIVE INGREDIENT:**

Polyoxin D zinc salt (1:1)<sup>1</sup>, Zinc 5-[[2-amino-5-O-(aminocarbonyl)-2-deoxy-L-xylonoyl]amino]-1-(5-carboxy-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-1,5-dideoxy-β-D-allofuranuronate

2.5 %

**OTHER INGREDIENTS:**

97.5 %

**TOTAL**

100.0%

<sup>1</sup>Equivalent to 2.2% polyoxorim and 0.3% metallic zinc

## KEEP OUT OF REACH OF CHILDREN CAUTION

SEE BOOKLET ON BACK FOR FIRST AID, ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

**For Product Use Information Call: 1-866-761-9397**

Produced for:

**Arysta LifeScience North America, LLC**

15401 Weston Parkway, Suite 150

Cary, NC 27513

EPA Reg. No. 66330-41

EPA EST. No. 70815-GA-001

AD083109

102680

**Net Weight: 11 lbs**



Arysta LifeScience<sup>®</sup>



# Wettable Powder Fungicide

## FIRST AID

<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><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>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>

## HOTLINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE:

Call PROSAR at 1-866-303-6952 or 1-651-632-8946 if calling from outside of the U.S.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if absorbed through skin, swallowed or inhaled. Causes moderate eye irritation. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse. Wear the appropriate Personal Protective Equipment (PPE).

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Socks
- Shoes
- Chemical-Resistant gloves

### User Safety Requirements

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

## USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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 moderately toxic to aquatic invertebrates and fish. 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 washwaters or rinsate. Do not allow runoff into lakes, streams, ponds or public waterways. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

## DIRECTIONS FOR USE

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

Carefully read and understand the Directions for Use and restrictions before applying this product.

Do not apply this product in any 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 State or Tribe responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and 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 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 entry into treated areas during the restricted entry interval (REI) of 4 hours unless wearing appropriate PPE.

PPE required for early entry into 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, socks, shoes, chemical resistant gloves.

### 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.

Keep children and pets out of treated area until sprays have dried.

### GENERAL INFORMATION

ENDORSE® Wettable Powder Fungicide is not for use on turf grown for commercial seed production.

ENDORSE Wettable Powder Fungicide is a systemic foliar applied fungicide for use in controlling or suppressing certain diseases on golf courses, residential lawns, parks and commercial and institutional grounds composed of cool and warm season grasses such as bluegrass, bentgrass, fescue, ryegrass, zoysiagrass, or their mixtures.

Apply ENDORSE Wettable Powder Fungicide as a preventive or curative treatment in conjunction with good turf management practices.

### RESISTANCE MANAGEMENT DIRECTIONS

ENDORSE Wettable Powder Fungicide contains a Group 19 fungicide. Fungal isolates with acquired resistance to Group 19 may eventually dominate the fungal population if Group 19 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by ENDORSE Wettable Powder Fungicide or other Group 19 Fungicides.

To delay fungicide resistance, consider:

- Avoiding the consecutive use of ENDORSE Wettable Powder Fungicide or other target site of action Group 19 fungicides that have a similar target site of action, on the same pathogens.
- Using tank-mixtures or premixes with fungicides from different target site of action Groups as long as the involved products are all registered for the same use and are both effective at the tank mix or prepack rate on the pathogen(s) of concern.
- Basing fungicide use on a comprehensive IPM program.
- Monitoring treated fungal populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for fungicide resistance management and/or IPM recommendations for specific crops and resistant pathogens.

### MIXING AND APPLICATION

When tank mixing ENDORSE Wettable Powder Fungicide with other products, observe all precautions and limitations on each separate product label. It is always advisable to conduct a spray compatibility test when you plan to mix this product with other products. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. Use combinations on a small number of plants to check for phytotoxicity and disease control before treating large areas. Do not use the combination if adverse effects are observed.

Do not apply this product through any type of irrigation system.

Mixing instructions for ENDORSE Wettable Powder Fungicide:

- Fill spray tank to ¾ of the intended final volume.
- Start spray tank agitation.
- Add the appropriate amount of product to the tank (refer to Rate and Schedule section of label). Follow the directions above for mixing other products in the spray tank.
- Agitate to ensure thorough mixing while adding the remaining required water.
- DO NOT allow the spray mixture to stand without agitation.

Mix only the amount of spray solution needed to treat the desired area.

For optimum control of labeled diseases, apply ENDORSE Wettable Powder Fungicide with sufficient water to provide a thorough coverage.

With the exception for treatment of Fairy Ring, irrigation or rainfall soon after treatment with ENDORSE Wettable Powder Fungicide will decrease disease control. For best control, do not irrigate for 12 hours after treatment.

For best results, apply after mowing.

TURF GRASSES		
Disease	Rate	Application Notes
<p><b>Control:</b> Brown Patch (<i>Rhizoctonia solani</i>) Large Patch (<i>Rhizoctonia solani</i>)</p>	11 lbs/acre (0.275 lb ai/acre in a minimum of 44 gallons of water)	<p>Repeat treatment on a 7-14 day schedule where environmental conditions are conducive to development of diseases.<sup>1</sup></p> <p>When symptoms are present, best control will be achieved by using a shorter interval.</p> <p>For best results apply after mowing.</p>
<p><b>Aids in Control:</b> Cool Weather Brown Patch (Yellow Patch) (<i>Rhizoctonia cerealis</i>)</p> <p>Foliar and Basal Anthracnose (<i>Colletotrichum cereale</i>)</p> <p>Gray Snow Mold (<i>Typhula ishikariensis</i> and <i>Typhula incarnata</i>)</p> <p>Leaf Spot/Melting Out (<i>Drechslera poae</i>)</p> <p>Pink Snow Mold (<i>Microdochium nivale</i>)</p> <p>Red Thread (<i>Laetisaria fuciformis</i>)</p> <p>Rhizoctonia Damping Off (<i>Rhizoctonia solani</i>)</p> <p>Waitea Patch (<i>Waitea circinata</i>)</p> <p>Zoysia Patch (<i>Rhizoctonia solani</i>)</p>		
<p><b>Aids in Suppression:</b> Gray Leaf Spot (<i>Pyricularia grisea</i>)</p>		
<p><b>Suppression and Short Term Control:</b> Fairy Ring (including <i>Marasmius</i> spp., <i>Lepiota</i>, spp. and <i>Agarius</i> spp.)</p>	4 ozs/1000 square feet in minimum of 2 gallons of water (0.275 lb ai/acre in a minimum of 88 gallons of water)	<p>Make two-three applications on a 7-day interval schedule.</p> <p>Use a penetrating wetting agent.</p> <p>Immediately following application, water in the treatment with sufficient irrigation (1/8-1/4") to wet the active root zone.</p>
<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Use in alteration with fungicides that have different modes of action.</li> <li>• <sup>1</sup> Consult your local extension agent or local recommendations for information relating to proper timing for control of these diseases.</li> </ul>		

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in dry place away from food or feed.

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

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Offer for recycling, if available, or dispose of empty outer packaging (bag) in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

## Warranty and Disclaimer Statement

1. Arysta LifeScience North America, LLC ("Arysta") 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 accordance with the Directions for Use under normal conditions of use.
2. This warranty does not extend to the use of this product contrary to label instructions and is subject to the inherent risks described below. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA, THE MANUFACTURER, AND THE SELLER DISCLAIM AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE, OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE BUYER AND THE USER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ARYSTA AND THE SELLER'S LIABILITY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. ARYSTA DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.**
3. The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Arysta. All such risks shall be assumed by the user or buyer.

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**OTHER INGREDIENTS:** . . . . . 97.5 %

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**FOR 24-HOUR CHEMICAL EMERGENCY: Spills, leaks, exposure or accidents:** Call CHEMTREC at 1-800-424-9300 or 1-703-527-9397 if calling from outside of the U.S.

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