

LABEL

GROUP	19	FUNGICIDE
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Polyoxin D Zinc Salt 11.3% WDG Fungicide

Water Dispersible Granules

COMMERCIAL

Non-Conventional Fungicide for Control or Suppression of Fungal Diseases in Turf
Found on Golf Courses, Sod Farms, and Commercial and Industrial Lawns and Outdoor-Grown
Ornamentals

READ THE LABEL AND BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NUMBER 32689 PEST CONTROL PRODUCTS ACT

GUARANTEE:
POLYOXIN D ZINC SALT.....11.3%

NET CONTENTS: 227 g to 15 kg

Kaken Pharmaceutical Co., Ltd.
28-8, Honkomagome 2-chome, Bunkyo-ku
Tokyo, JAPAN 113-8650

CRW Regulatory Services Inc.
2057 Oxford Street, Halifax, Nova Scotia, B3L 2T3 Canada
902-401-7209

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Avoid contact with skin and clothing. 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.

Do not enter or allow worker entry into treated areas until the sprays have dried unless wearing appropriate personal protective equipment (PPE).

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

The PPE required for early entry to treated areas that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, socks, shoes, and chemical-resistant gloves.

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

- Long-sleeved shirt and long pants;
- Socks;
- Shoes; and,
- Chemical-resistant gloves.

Users should:

- Remove clothing/PPE immediately if pesticides get 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.

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

ENVIRONMENTAL PRECAUTIONS

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

FIRST AID:

- **If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
- **In 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 centre or doctor for treatment advice
- **If swallowed:** Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.
- **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 centre or doctor for further treatment advice.

Take container, label, or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:

Treat symptomatically.

STORAGE:

To prevent contamination store this product in the original container in a dry location away from food or feed.

DISPOSAL

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

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DIRECTIONS FOR USE:

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) coarse classification. Boom height must be 60 cm or less above the crop or ground.

DO NOT apply by air.

GENERAL INFORMATION:

Product may be applied to turf found on golf courses, sod farms, and commercial and industrial lawns as a preventative or curative treatment of plant diseases in conjunction with good management practices. Product may also be applied to outdoor-grown ornamentals.

MIXING AND APPLICATION INSTRUCTIONS:

Mix product in water and apply as a foliar spray to turf and ornamentals using ground spray equipment. For optimum control of labeled diseases, apply in sufficient volume of water to provide thorough coverage with minimal run-off. See the table below for information on application timing for specific diseases.

MIXING:

Mixing instructions for product:

- Fill tank with water to ½ of the intended final volume.
- Start agitation of the spray tank.
- Add the appropriate amount of product to the tank according to the rates in this label.
- Agitate to ensure thorough mixing while adding the remaining required water.
- Do not allow the mixture to stand without agitation.
- Mix only the amount of solution needed to treat the desired area.

When tank-mixing this product with other products, observe all precautions and limitations on each separate product label.

When planning to mix this product with others, it is advisable to conduct a "jar test" to determine the physical compatibility of this product with the others. Using a large container, add the products (with agitation) to approximately one litre of water in the proportions they will appear in the final mixture. Add dry formulations like this product first, followed by 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 sequence for adding required ingredients to the tank.

To assess the potential for phytotoxicity, test tank mixtures on a small number of plants prior to more widespread application.

The use of an adjuvant may enhance spray coverage of dense crop canopy, or plants that are difficult to wet due to waxy or hairy surfaces. Use only adjuvants that are labeled for such uses. Refer to "Mixing and Application Instructions" above for information on testing physical compatibility of Polyoxin D Zinc Salt 11.3% WDG Fungicide with other products.

CROPS, DISEASES AND APPLICATION RATES:

TURFGRASSES:		
Creeping bentgrass, Creeping fescues, Kentucky bluegrasses, Perennial ryegrasses, and <i>Poa annua</i>		
Disease Controlled	Application Rate	Application Notes
<p>Anthracnose (<i>Colletotrichum cereale</i>; formerly <i>Colletotrichum graminicola</i>).</p> <p>Brown ring patch/Waitea patch (<i>Waitea circinata</i> var. <i>circinata</i>)</p> <p>Red thread (<i>Laetisaria fuciformis</i>)</p>	27 g/100 m ²	<p>For control of listed diseases, apply (1) <u>preventatively</u> when environmental conditions favour disease development or turf has a history of disease, or (2) <u>curatively</u> at the first appearance of disease symptoms.</p> <p>Apply in 6 to 8 litres of water per 100 m² on a 14-day spray interval.</p> <p>Uniform spray application is essential for optimum control of labeled diseases. To prevent diseases from spreading onto golf greens, always treat aprons and fairway approaches.</p> <p>Do not apply more than 3 applications per season.</p>
<p>Brown patch (<i>Rhizoctonia solani</i>)</p> <p>Leaf spot and Melting-out disease (<i>Drechslera poae</i>)</p> <p>Yellow Patch (<i>Rhizoctonia cerealis</i>)</p>	27 g/100 m ²	<p>For control of listed diseases, apply <u>preventatively</u> before disease symptoms are observed when environmental conditions favour disease or turf has a history of disease.</p> <p>Apply in 6 to 8 litres of water per 100 m² on a 14-day spray interval.</p> <p>Uniform spray application is essential for optimum control of labeled diseases.</p> <p>To prevent diseases from spreading onto golf greens, always treat aprons and fairway approaches.</p> <p>Do not apply more than 3 applications per season.</p>
<p>Fairy Ring (Types I and II) (various Basidiomycetes)</p>	27 g/100 m ²	<p>For control of listed diseases, apply (1) <u>preventatively</u> when environmental conditions favour disease development or turf has a history of disease, or (2) <u>curatively</u> at the first appearance of disease symptoms.</p> <p>Apply 27 g product/100 m² tank-mixed with a non-ionic surfactant applied at 130 to 190 ml/100 m².</p> <p>Apply spray solution in 11 to 17 litres of water per 100 m².</p> <p>Re-apply on a 7-day to 14-day spray interval.</p> <p>Do not apply more than 3 applications per season.</p>

TURFGRASSES:		
Creeping bentgrass, Creeping fescues, Kentucky bluegrasses, Perennial ryegrasses, and <i>Poa annua</i>		
Disease Controlled	Application Rate	Application Notes
Grey snow mould <i>(Typhula incarnata)</i> <i>(Typhula ishikariensis)</i> (Suppression) Pink snow mould <i>(Microdochium nivale)</i> (Suppression)	27 g/100 m ²	For suppression of listed diseases, apply (1) <u>preventatively</u> when environmental conditions favour disease development or turf has a history of disease, or (2) <u>curatively</u> at the first appearance of disease symptoms. Apply in a minimum of 8 litres of water per 100 m ² once in the fall. Re-apply on a 21-day interval in late fall or early winter before snow fall when conditions favour heavy disease pressure or if there is a prior history of disease. Do not apply more than 3 applications per season.
Notes: Use product in a rotational spray program with other fungicides with different modes of action to reduce the possibility of disease resistance.		

OUTDOOR-GROWN ORNAMENTALS		
Disease Controlled	Application Rate	Application Notes
Botrytis blight, Grey mould <i>(Botrytis cinerea)</i> (Suppression)	150 - 584 g/ 1000 L (17 - 66 g a.i./ 1000 L)	Apply as a foliar spray to provide thorough coverage of foliage (and flowers when present) with minimal run-off. Begin as a preventative application when conditions favour disease development and continue on a 7-14 day interval as needed to maintain suppression. Do not apply more than 3 applications per season. Not for use in greenhouses.
Notes: Use product in a rotational spray program with other fungicides with different modes of action to reduce the possibility of disease resistance.		

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, please note that Polyoxin D Zinc Salt 11.3% WDG Fungicide contains a Group 19 fungicide. Any fungal population may contain individuals naturally resistant to Polyoxin D Zinc Salt 11.3% WDG Fungicide and other Group 19 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance:

- Where possible, rotate the use of Polyoxin D Zinc Salt 11.3% WDG Fungicide or other Group 19 fungicides with different groups that control the same pathogens. Avoid use of more than the maximum number of seasonal applications listed in the Directions for Use section of the label, and do not apply

more than two sequential applications of Polyoxin D Zinc Salt 11.3% WDG Fungicide before alternating with another registered fungicide with a different mode of action.

- Fungicide use should be based on an integrated disease management program that includes scouting, historical information related to pesticide use and crop rotation and considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Monitor treated fungal populations for resistance development. Notify Kaken Pharmaceutical Co., Ltd. if reduced sensitivity of the pathogen to Polyoxin D Zinc Salt 11.3% WDG Fungicide is suspected. If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Kaken Pharmaceutical Co., Ltd.

NOTICE TO USER:

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