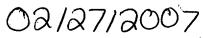
68173-2

U.... ED STATES ENVIRONMENTAL PROTEC. UN AGENCY



Ms. Doina Bujor Regulatory Manager KAKEN PHARMACEUTICAL c/o Arysta LifeScience North America Corporation 15401 Weston Parkway, Suite 150 Cary, NC 27513

# FEB 2 7 2007

Subject: KAKEN PHARMACEUTICAL c/o Arysta LifeScience North America Corporation, ENDORSE® Wettable Powder Fungicide EPA Registration No. 68173-2 Label Amendment to Return the Commercial Seed Prohibition to the Label

Application Dated 11/15/2006

Dear Ms. Bujor:

Enclosure

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(A), is acceptable provided that you:

- 1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- Submit three (3) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Chris Pfeifer at 703-308-0031 or by email at: <u>pfeifer.chris@epa.gov</u>. A stamped copy of the label is enclosed for your records.

Sincerely,

Linda A. Hollis, Chief Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

<u> </u>				CONCURRENC	ES .	 · · · · · · · · · · · · · · · · · · ·	· · ·
SYMBOL	7511 P	7511P					
	PFEIFER	Peterson					
DATE	2/8/07	2/14/07					
EPA Form 1	320-1A (1/90)	• •	Pi	rinted on Recycled	l Paper	OFFIC	IAL FILE COP

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ENDORSE Wettable Powder Fungicide Kaken Master (Clean) PM103106c Page 1 of 17

# ENDORSE<sup>®</sup> Wettable Powder Fungicide

# For use on Turf, Ornamentals and Non-Food Ginseng

# Prohibited for Any Food or Feed Use

	GROUP	19	FUNGICIDE
ACTIVE INGREDIENT: Polyoxin D zinc sait (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- <i>B</i> -D-			
allofuranuronate			2.5 %
OTHER INGREDIENTS:			<u>97.5 %</u>
TOTAL			100.0%

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

# **KEEP OUT OF REACH OF CHILDREN**

# CAUTION

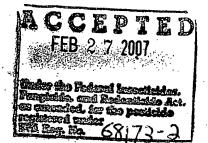
## SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 68173-2 EPA Est. No. \_\_\_\_\_

Produced by: Kaken Pharmaceutical Co. Ltd. Agro Chemicals and Animal Health Products Department 28-8, Honkomagonme 2-chome Bunkyo-ku, Tokyo 113-8650, Japan

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

Net Weight: 1 pound, 1.6 ounces 11 lbs



WATER SOUDELER AND A GARAGENE SUBLATER

# **ENDORSE<sup>®</sup> Wettable Powder Fungicide**

# IN WATER SOLUBLE PACKS

### For Use on Turf, Ornamental and Non-Food Ginseng

Prohibited for Any Food or Feed Use

	GROUP	19	FUNGICIDE
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-ß-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 SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

EPA Reg. No. 68173-2 EPA EST. No.

Produced by: Kaken Pharmaceutical Co. Ltd. Agro Chemicals and Animal Health Products Department 28-8, Honkomagonme 2-chome Bunkyo-ku, Tokyo 113-8650, Japan

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

Net weight: 1 pound, 1.6 ounces Each water soluble pack contains 1 lb, 1.6 ounces of product. There is one pack per bag

and 10 bags per case.

	FIRST AID
If on skin or clothing	<ul> <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>
lf in eyes	<ul> <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> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor for treatment advice.</li> <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>
If inhaled	<ul> <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>

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<sup>®</sup> Wettable Powder Fungicide is not for use on turf being 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. ENDORSE Wettable Powder Fungicide is also for use on ornamentals and ginseng. (Refer to the TURF GRASSES, GINSENG and ORNAMENTALS tables below for specific diseases.)

Apply ENDORSE Wettable Powder Fungicide as a preventive or curative treatment in conjunction with good turf and ornamental 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 affects are observed.

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

Mixing instructions for ENDORSE Wettable Powder Fungicide in water soluble pack:

#### ENDORSE Wettable Powder Fungicide Kaken Master (Clean) PM103106c Page 6 of 17

- Fill spray tank <sup>3</sup>/<sub>4</sub> full
- Start spray tank agitation
- Drop water soluble pack(s) in tank.
- Direct the balance of water at the floating pack(s)
- Pack(s) must be dissolved before recycling through spray tank

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.

Application NotesetRepeat treatment on a 7-14 day schedule wherelbenvironmental conditions are conducive to development of diseases. 1When symptoms are present, best control will be achieved by using a shorter interval.For best results apply after
<ul> <li>day schedule where environmental conditions are conducive to development of diseases. <sup>1</sup></li> <li>When symptoms are present, best control will be achieved by using a shorter interval.</li> </ul>
diseases. <sup>1</sup> When symptoms are present, best control will be achieved by using a shorter interval.
best control will be achieved by using a shorter interval.
For best results apply after
mowing.

TURF GRASSES					
Disease	Rate	Application Notes			
Aids in Suppression: (Except California)					
Gray Leaf Spot <i>(Pyricularia grisea)</i>					
Suppression and Short Term Control:	1 pack/4,400 square feet in a minimum of 88	Make two-three applications on a 7-day interval schedule			
Fairy Ring (including <i>Marasmius</i> spp., <i>Lepiota</i> , spp. and <i>Agarius</i> spp.)	gallons of water (0.275 lb ai/acre)	Use a penetrating wetting agent.			
		Immediately following application, water in the treatment with sufficient irrigation (0.5-1") to wet the active root zone.			

- Use in alternation with fungicides that have different modes of action.
- <sup>1</sup> Consult your local extension agent or local recommendations for information relating to proper timing for control of these diseases.

GINSENG (Except California)				
Foliar Disease Control	Rate	Application Notes		
Alternaria blight ( <i>Alternaria panax</i> ) Botrytis blight ( <i>Botrytis cinerea</i> )	1 pack/0.5 – 1 acre in 100 gallons of water (0.03 - 0.06 lb ai/100 gal/acre)	Apply as a foliar spray every 7 – 10 days. Apply prior to disease development and when conditions are conducive for disease. <sup>1</sup>		
Root and Crown Disease Control	Rate	Application Notes		
Cylindrocarpon root rot (Cylindrocarpon destructans)	1 pack/0.5 acre in 100 gallons of water (0.06 lb ai/100 gal/acre)	Apply as a drench every 14 days.		
Rhizoctonia root and crown rot ( <i>Rhizoctonia solani</i> )	1 pack/0.5 – 1 acre in 100 gallons of water (0.03 – 0.06 lb ai/100 gal/acre)	Apply as a drench every 14 – 28 days.		

### Notes:

- Do not use for food or feed purposes within 1 year of treatment.
- Apply within 2 weeks following plant emergence and continue throughout the season.
- Use in alternation with fungicides that have different modes of action.
- <sup>1</sup> Consult your local extension agent or local recommendations for information relating to proper timing for control of these diseases.

ORNAMENTALS					
Foliar Disease Control	Rate	Application Notes			
Botrytis blight ( <i>Botrytis cinerea</i> )	1 pack/0.5 – 1 acre in 100 gallons of water (0.03 – 0.06 lb ai/100 gal/acre)	Apply as a foliar spray every 7 – 10 days. Apply prior to disease			
Alternaria blight ( <i>Alternaria panax</i> )	1 pack/0.5 acre in 100 gallons of water (0.06 lb ai/100 gal/acre)	<ul> <li>development and when conditions are conducive fo disease.<sup>1</sup></li> </ul>			
Root and Crown Disease Control	Rate	Application Notes			
Rhizoctonia root and crown rot ( <i>Rhizoctonia solani</i> )	1 pack/0.5 – 1 acre in 100 gallons of water (0.03 – 0.06 lb ai/100 gal/acre)	Apply as a drench every 14 – 28 days.			

- Use in alternation with fungicides that have different modes of action.
- <sup>1</sup> Consult your local extension agent or local recommendations for information relating to proper timing for control of these diseases.

## 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:** Completely empty bag into application equipment. Then 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. Kaken Pharmaceutical Co. Ltd. ("Kaken") 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, KAKEN 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. KAKEN, 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, KAKEN AND THE SELLER'S LIABILITY SHALL BE LIMITED TO THE REFUND OF THE KAKEN PURCHASE PRICE. 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 Kaken. All such risks shall be assumed by the user or buyer.

ENDORSE is a registered trademark of Arysta LifeScience North America Corporation.

ENDORSE Wettable Powder Fungicide Kaken Master (Clean) PM103106c Page 10 of 17

NONWATER SOLUBLE PACK PACKAGING, SUBLABEL

# ENDORSE<sup>®</sup> Wettable Powder Fungicide

# For use on Turf, Ornamentals and Non-Food Ginseng

# Prohibited for any Food or Feed Use

GROUP 19	FUNGICIDE
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-ß-D-	
allofuranuronate	
OTHER INGREDIENTS:	
TOTAL	100.0%

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

# **KEEP OUT OF REACH OF CHILDREN**

# CAUTION

#### SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

EPA Reg. No. 68173-2 EPA EST. No.\_\_\_\_

Produced by: Kaken Pharmaceutical Co. Ltd. Agro Chemicals and Animal Health Products Department 28-8, Honkomagonme 2-chome Bunkyo-ku, Tokyo 113-8650, Japan

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

Net contents: 11 lbs

FIRST AID			
lf on skin or clothing	<ul> <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>		
lf in eyes	<ul> <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>		
If swallowed	<ul> <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>		
lf inhaled	<ul> <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<sup>®</sup> 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. ENDORSE Wettable Powder Fungicide is also for use on ornamentals and ginseng. (Refer to the TURF GRASSES, GINSENG and ORNAMENTALS tables below for specific diseases.)

Apply ENDORSE Wettable Powder Fungicide as a preventive or curative treatment in conjunction with good turf and ornamental 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 affects are observed.

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

Mixing instructions for ENDORSE Wettable Powder Fungicide:

- Fill spray tank to <sup>3</sup>⁄<sub>4</sub> 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.

	TURF GRASSES	•
Disease	Rate	Application Notes
<b>Control:</b> Brown Patch Large Patch	11 lbs/acre (0.275 lb ai/acre in a minimum of 44 gallons of water)	Repeat treatment on a 7-14 day schedule where environmental conditions are conducive to development of diseases. <sup>1</sup>
Aids in Control: (Except California)		When symptoms are present,
Cool Weather Brown Patch (Yellow Patch) ( <i>Rhizoctonia cerealis</i> )		best control will be achieved by using a shorter interval.
Foliar and Basal Anthracnose (Collectotrichum graminicola)		For best results apply after mowing.
Gray Snow Mold (Typhula ishikariensis and Typhula incarnate)		
Leaf Spot/Melting Out ( <i>Dreschlera poae</i> )		
Pink Snow Mold ( <i>Microdochium solani</i> )		
Red Thread ( <i>Laetisaria fuciformis</i> )		
Rhizoctonia Damping Off ( <i>Rhizoctonia solani</i> )		
Zoysia Patch ( <i>Rhizoctonia solani</i> ) on cool and warm season turf grasses		

TURF GRASSES					
Disease	Rate	Application Notes			
Aids in Suppression: (Except California)					
Gray Leaf Spot (Pyricularia grisea)					
Suppression and Short Term Control:	4 ozs/1000 square feet in minimum of 2 gallons of	Make two-three applications on a 7-day interval schedule.			
Fairy Ring (including <i>Marasmius</i> spp., <i>Lepiota</i> , spp. and <i>Agarius</i> spp.)	water (0.275 lb ai/acre in a minimum of 88 gallons of water)	Use a penetrating wetting agent.			
		Immediately following application, water in the treatment with sufficient irrigation (0.5-1") to wet the active root zone.			

• Use in alteration with fungicides that have different modes of action.

• <sup>1</sup> Consult your local extension agent or local recommendations for information relating to proper timing for control of these diseases.

GINSENG (Except California)		
Foliar Disease Control	Rate	Application Notes
Alternaria blight ( <i>Alternaria panax</i> ) Botrytis blight ( <i>Botrytis cinerea</i> )	1.1 – 2.2 lb/100 gal/acre (0.03 - 0.06 lb ai /100 gal/ acre)	Apply as a foliar spray every 7 – 10 days. Apply prior to disease development and when conditions are conducive for disease. <sup>1</sup>
Root and Crown Disease Control	Rate	Application Notes
Cylindrocarpon root rot (Cylindrocarpon destructans)	2.2 lb/100 gal/acre (0.06 lb ai/100 gal/acre)	Apply as a drench every 14 days.
Rhizoctonia root and crown rot ( <i>Rhizoctonia solani</i> )	1.1 - 2.2 lb/100 gal/acre (0.03 – 0.06 lb ai/100 gal/acre)	Apply as a drench every 14 – 28 days.

## Notes:

• Do not use for food or feed purposes within 1 year of treatment.

• Apply within 2 weeks following plant emergence and continue throughout the season.

- Use in alternation with fungicides that have different modes of action.
- <sup>1</sup> Consult your local extension agent or local recommendations for information relating to proper timing for control of these diseases.

ORNAMENTALS		
Rate	Application Notes	
1.1 – 2.2 lb/100 gal/acre (0.03 – 0.06 lb ai/100 gal/acre)	Apply as a foliar spray every 7 – 10 days. Apply prior to disease development and when conditions are conducive for disease. <sup>1</sup>	
2.2 lb/100 gal (0.06 lb ai/100 gal/acre)		
Rate	Application Notes	
1.1 - 2.2 lb/100 gal/acre (0.03 – 0.06 lb ai/100 gal/acre)	Apply as a drench every 14 - 28 days.	
	Rate         1.1 – 2.2 lb/100 gal/acre         (0.03 – 0.06 lb ai/100         gal/acre)         2.2 lb/100 gal (0.06 lb         ai/100 gal/acre)         Rate         1.1 - 2.2 lb/100 gal/acre         (0.03 – 0.06 lb ai/100	

Use in alternation with fungicides that have different modes of action.

 <sup>1</sup> Consult your local extension agent or local recommendations for information relating to proper timing for control of these diseases.

## **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:** Completely empty bag into application equipment. Then dispose of empty 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. Kaken Pharmaceutical Co. Ltd. ("Kaken") 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, KAKEN 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. KAKEN, 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, KAKEN AND THE SELLER'S LIABILITY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. KAKEN 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 Kaken. All such risks shall be assumed by the user or buyer.

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