

2024-5416
2024-11-19

GROUP	50	FUNGICIDE
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PYRIOFENONE 300SC Fungicide

**For control or suppression of powdery mildew on outdoor
ornamentals and labeled crops.**

COMMERCIAL

SUSPENSION

READ THE LABEL BEFORE USING

ACTIVE INGREDIENT: PYRIOFENONE..... 300 g/L

Contains 1,2-benzisothiazolin-3-one as a preservative at 0.035% as a preservative

OR

Contains 2-Bromo-2-nitropropane-1,3-diol at 0.0088%

and

5-Chloro-2-methyl-4-isothiazolin-3-one at 0.00084%

and

2-Methyl-4-isothiazolin-3-one at 0.00028% as preservatives

REGISTRATION NO: 32376 PEST CONTROL PRODUCTS ACT

Net Contents: 500 ml to 200 L

ISK Biosciences Corporation
7470 Auburn Road, Suite A
Concord, Ohio 44077 U.S.A.
1-877-706-4640

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or 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 apply by air.

Not for use in Residential Areas.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

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

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.

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 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 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.

In Case of Emergency: Call 1-888-484-7546.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms. Observe spray buffer zones specified under **DIRECTIONS FOR USE**.

Pyriofenone is persistent and may carryover. It is recommended that any products containing pyriofenone not be used in areas treated with this product during the previous season.

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 filter strip between the treated area and the edge of the water body.

STORAGE

Store this product away from food or feed.

DISPOSAL

For recyclable containers:

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial/territorial requirements.

For returnable containers:

DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For refillable containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. DO NOT reuse this container for any other purpose.

Disposal of unused, unwanted product:

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

DIRECTIONS FOR USE

PYRIOFENONE 300SC Fungicide is a fungicide with preventative and locally systemic properties for foliar diseases. PYRIOFENONE 300SC Fungicide must be applied in scheduled protective programs and used in rotation with products with a different mode of action.

Under conditions favorable for disease development, the highest rate specified and shortest application interval should be used. Thorough, uniform coverage is essential for disease control.

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.

DO NOT allow releases, effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

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) medium classification. Boom height must be 60 cm or less above the crop or ground.

Airblast application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. DO NOT apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

DO NOT apply by air.

Spray buffer zones:

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	Crop		Buffer Zones (metres) Required for the Protection of:			
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:	
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	Cucurbits Vegetables Crop Group 9; Grapes; Caneberries; Gooseberries; Saskatoon berries; Tomatoes, outdoor ornamentals		1	0	1	0
Airblast	Cucurbits Vegetables Crop Group 9; Grapes; Caneberries; Gooseberries; Saskatoon berries; Outdoor ornamentals	Early growth stage	1	0	1	0
		Late growth stage	1	0	1	0

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

MIXING

NOTE: Slowly invert container several times to assure uniform mixture of formulation before adding this product to the spray tank.

The required amount of PYRIOFENONE 300SC Fungicide should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of PYRIOFENONE 300SC Fungicide in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations. DO NOT allow spray mixture to stand overnight or for prolonged periods. Prepare only

the amount of spray required for immediate use. Spraying equipment should be thoroughly cleaned immediately after the application.

TANK MIXING AND COMPATIBILITY

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

PYRIOFENONE 300SC FUNGICIDE is generally compatible with other fungicides, insecticides, fertilizers and micronutrient products provided sufficient free water is available for dispersion of all the tank mix products. However, the physical compatibility of this product with tank mix partners must be evaluated before use. Conduct a jar test with intended tank-mix product(s) prior to preparation of large volumes. Use the following procedure: 1) Pour the recommended proportions of the products into a suitable container of water, 2) Mix thoroughly and 3) Allow to stand 5 minutes. If the combination remains mixed or can be re-mixed readily, it is considered physically compatible. Any physical incompatibility in the jar test indicates that PYRIOFENONE 300SC FUNGICIDE must not be used in the tank-mix. Since not all crop varieties have been tested with all possible tank mix combinations, the combination should also be tested for crop safety on a small portion of the crop to ensure that phytotoxicity will not occur.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact ISK Biosciences Corporation at 1-877-706-4640 for information before applying any tank mix that is not specifically recommended on this label.

APPLICATION

Apply PYRIOFENONE 300SC Fungicide in sufficient water to obtain adequate coverage of the foliage. Water volume to be used will vary with crop and amount of plant growth. Spray volume will usually range from 200 to 1000 litres per hectare for dilute ground sprays. Do not apply by air. **DO NOT** apply using handheld mistblower/airblast or handheld fogging equipment.

DIRECTIONS FOR USE			
Crop	Diseases	Use Rate L Product Per Hectare	Instructions

Cucurbits Vegetables Crop Group 9	Powdery Mildew (<i>Podosphaera xanthii</i> , <i>Erysiphe cichoracearum</i>)	0.3 to 0.366 (90 to 110 g a.i./ha)	<p>Application Instructions: Initiate applications prior to disease development and continue on a 7 to 10 day interval beginning with initial flowering or when disease conditions are favorable for disease development, but prior to disease development. Use the low rate and long interval as disease preventative sprays or when disease conditions are low. Increase to highest rate and shortest interval under moderate to heavy disease pressure. Normal spray volumes range from 200 to 1000 litres per hectare for dilute ground sprays</p> <p>Resistance Management: Do not make more than 2 consecutive applications of PYRIOFENONE 300SC Fungicide or other Group 50 containing fungicides before rotating to a fungicide with a different mode of action.</p> <p>Restrictions: Do not apply more than 1.2 L/ha/year The Pre-Harvest Interval (PHI) for this crop is 0 days.</p>
Includes all members of the Cucurbit Vegetable Crop Group 9: Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumbers; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); <i>Momordica spp</i> (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); muskmelon, <i>Cucumis melo</i> (includes true cantaloupe, cantaloupe, casaba, Santa Claus melon; crenshaw melon; honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon); pumpkin; squash, summer (<i>Cucurbita pepo</i> includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash; watermelon (<i>Citrullus spp.</i>); and hybrids and/or varieties of these.			
Grapes	Powdery mildew (<i>Erysiphe necator</i>)	0.3 to 0.366	Application Instructions:
Strawberries	Powdery mildew (Suppression) (<i>Podosphaera aphanis</i>)	(90 to 110 g a.i./ha)	For powdery mildew control, begin fungicide applications preventatively and continue as needed as per instructions below. Use the low rate and long interval as disease preventative sprays or when disease conditions are low. Increase to
Caneberries	Powdery mildew		

(blackberry; loganberry; red and black raspberry; wild raspberry; cultivars and/or hybrids of these)	(Suppression) (<i>Sphaerotheca macularis</i>)	<p>highest rate and shortest interval under moderate to heavy disease pressure. Normal spray volumes range from 200 to 1000 litres per hectare for dilute ground sprays, but can be up to 2000 litres per hectare for vineyards.</p> <p>Grapes: For use on all types of grapes (wine, table, raisin, and juice). Applications to grape should be made on a 14-day interval.</p> <p>Applications to strawberries, caneberries, goose berries and Saskatoon berries should be made on a 7 to 10-day interval.</p> <p>Resistance Management: Do not make more than 2 consecutive applications of PYRIOFENONE 300SC Fungicide or other Group 50 containing fungicides before rotating to a fungicide with a different mode of action.</p> <p>Restrictions: Do not apply more than 1.2 L/ha/year The Pre-Harvest Interval (PHI) for this crop is 0 days.</p>
Goose Berries	Powdery mildew (Suppression) (<i>Sphaerotheca macularis</i>)	
Saskatoon Berries	Powdery mildew (Suppression) (<i>Podosphaera clandestina</i>)	

DIRECTIONS FOR USE			
Crop	Diseases	Use Rate L Product Per Hectare	Instructions
Tomatoes	Powdery mildew (Suppression) (<i>Leveillula taurica</i>)	0.3 to 0.366 (90 to 110 g a.i./ha)	<p>Apply prior to disease initiation on a 7 to 14-day schedule when conditions are favorable for disease development.</p> <p>Use the low rate and long interval when conditions favor disease development and disease pressure is low. Increase use to the highest rate and shortest interval under heavy disease pressure. Normal spray volumes range from 200 to 1000 litres per hectare for dilute ground sprays.</p> <p>Resistance Management: Do not make more than 2 sequential applications of PYRIOFENONE 300SC or other Group 50 containing fungicides before rotating to a fungicide with a different mode of action.</p> <p>Restrictions: Do not apply more than 1.2 L/ha/year The Pre-Harvest Interval (PHI) for this crop is 0 days.</p>

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than ISK Biosciences Corporation under the User Requested Minor Use Label Expansion program. For these uses, ISK Biosciences Corporation has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

<p>Greenhouse grown Tomatoes</p>	<p>Suppression of powdery mildew (<i>Leveillula taurica</i>)</p> <p>Control of powdery mildew (<i>Oidium lycopersici</i>, <i>Oidium neolycopersici</i>)</p>	<p>0.3 to 0.366 (90 to 110 g a.i./ha)</p>	<p>Initiate applications prior to disease development and continue on a 7 to 10 day interval beginning with initial flowering or when disease conditions are favorable for disease development, but prior to disease development. Use the low rate and long interval as disease preventative sprays or when disease conditions are low. Increase to highest rate and shortest interval under moderate to heavy disease pressure. Normal spray volumes range from 300 to 1500 litres per hectare.</p> <p>Resistance Management: Do not make more than 2 sequential applications of PYRIOFENONE 300SC or other Group 50 containing fungicides before rotating to a fungicide with a different mode of action.</p> <p>Restrictions: Do not apply more than 1.2 L/ha/crop cycle (360 g a.i./ha/crop cycle) The Pre-Harvest Interval (PHI) for this crop is 0 days.</p>
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<u>Greenhouse grown Peppers</u>	Suppression of powdery mildew (<i>Leveillula taurica</i>)	0.3 to 0.366	Initiate applications prior to disease development and continue on a 7 to 10 day interval beginning with initial
<u>Greenhouse grown Eggplant</u>		(90 to 110 g a.i./ha)	flowering or when disease conditions are favorable for disease development, but prior to disease development. Use the low rate and long interval as disease preventative sprays or when disease conditions are low. Increase to highest rate and shortest interval under moderate to heavy disease pressure. Normal spray volumes range from 500 to 2000 litres per hectare.
			<p><u>Resistance Management:</u> Do not make more than 2 sequential applications of PYRIOFENONE 300SC or other Group 50 containing fungicides before rotating to a fungicide with a different mode of action.</p> <p><u>Restrictions:</u> Do not apply more than 1.2 L/ha/crop cycle (360 g a.i./ha/crop cycle) The Pre-Harvest Interval (PHI) for this crop is 0 days.</p>

<p>Greenhouse grown Cucumbers</p>	<p>Control of powdery mildew (<i>Podosphaera xanthii</i>; <i>Golovinomyces cichoracearum</i>, syn. <i>Erysiphe cichoracearum</i>)</p>	<p>0.3 to 0.366 (90 to 110 g a.i./ha)</p>	<p>Initiate applications prior to disease development and continue on a 7 to 10 day interval beginning with initial flowering or when disease conditions are favorable for disease development, but prior to disease development. Use the low rate and long interval as disease preventative sprays or when disease conditions are low. Increase to highest rate and shortest interval under moderate to heavy disease pressure. Normal spray volumes range from 500 to 2500 litres per hectare.</p> <p>Resistance Management: Do not make more than 2 sequential applications of PYRIOFENONE 300SC or other Group 50 containing fungicides before rotating to a fungicide with a different mode of action.</p> <p>Restrictions: Do not apply more than 1.2 L/ha/crop cycle (360 g a.i./ha/crop cycle) The Pre-Harvest Interval (PHI) for this crop is 0 days.</p>
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Crop	Diseases	Use Rate Product 100L	mL per Instructions
Greenhouse grown Ornamental plants	Control of powdery mildew (<i>Golovinomyces cichoracearum</i> , syn. <i>Erysiphe cichoracearum</i> ; <i>Podosphaera</i> spp.)	15 to 45	<p>Initiate applications prior to disease development and continue on a 7 to 10 day interval beginning with initial flowering or when disease conditions are favorable for disease development, but prior to disease development. Use the low rate and long interval as disease preventative sprays or when disease conditions are low. Increase to highest rate and shortest interval under moderate to heavy disease pressure. The maximum spray volume is 1000 L/ha.</p> <p>Resistance Management: Do not make more than 2 sequential applications of PYRIOFENONE 300SC or other Group 50 containing fungicides before rotating to a fungicide with a different mode of action.</p> <p>Restrictions: Do not apply more than 900 mL product (270 g a.i./ha/year (e.g. 2 at 135 g a.i./ha or 3 at 90 g a.i./ha or 6 at 45 g a.i./ha).</p>

ROTATIONAL CROP RESTRICTIONS

Crops on this label may be planted immediately after the last treatment. Do not plant cereal grains within 1 year after the last application. With the exception of cereal grains, crops not registered on this label may be planted 30 days after the last application.

INTEGRATED PEST MANAGEMENT

PYRIOFENONE 300SC Fungicide is a disease control agent when used according to label directions for control of labeled fungi. PYRIOFENONE 300SC Fungicide is recommended for use as part of an Integrated Pest Management (IPM) program, which may include the use of disease-resistant crop varieties, cultural practices, crop rotation, biological disease control agents, pest scouting and disease forecasting systems aimed at preventing economic pest damage. Practices known to reduce disease development should be followed. Consult your provincial cooperative extension service or local agricultural authorities for additional IPM strategies established in your area. PYRIOFENONE 300SC Fungicide may be used in disease forecasting programs that recommend application timing based upon environmental factors that favor disease development.

RESISTANCE MANAGEMENT

For resistance management, PYRIOFENONE 300SC Fungicide contains a Group 50 fungicide. Any fungal population may contain individuals naturally resistant to PYRIOFENONE 300SC Fungicide and other Group 50 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 PYRIOFENONE 300SC Fungicide or other Group 50 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an integrated disease management (IPM) 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.
- Where possible, make use of predictive disease models to effectively time fungicide applications.
- Monitor treated fungal populations for resistance development. Notify ISK Biosciences Corporation if reduced sensitivity of the pathogen to PYRIOFENONE 300SC 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 target site of action, if available.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.

- For further information and to report suspected resistance, contact ISK Biosciences Corporation, at 1-877-706-4640.

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.