

GROUP	2	FUNGICIDE
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ROVRAL®
FUNGICIDE
WETTABLE POWDER

ACTIVE INGREDIENT: IPRODIONE.....50%

Warning, contains the allergen sulfite.

FOR USE ON
LETTUCE (greenhouse), CONIFER SEEDLINGS, IMPORTED CARROT SEED AND
ORNAMENTALS

COMMERCIAL

REGISTRATION NO. 15213
PEST CONTROL PRODUCTS ACT

CAUTION

POISON

READ THE LABEL AND ACCOMPANYING BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

NET CONTENTS 1 KG

Label

IN CASE OF EMERGENCY, CALL 1-800-331-3148 (24 HOURS)

FMC of Canada Limited
6755 Mississauga Road, Suite 204
Mississauga, ON L5N 7Y2
1-833-362-7722

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

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

During mixing, loading, application, clean-up and repair, wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, chemical-resistant footwear and a respirator with a NIOSH- approved organic-vapour-removing cartridge with a prefilter approved for pesticides or a NIOSH approved canister approved for pesticides.

When applying using open airblast equipment or for overhead spray, also wear chemical resistant headgear. Chemical resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) on the label. Employers should make every effort to schedule pesticide applications and worker tasks in order to avoid early entry of workers into treated areas. Under exceptional circumstances, certified pesticide applicators may enter treated areas for short-term tasks not involving hand labour if at least 4 hours have passed since application and a long-sleeved shirt, long pants, rubber boots, socks, goggles, gloves and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides is worn. Time spent in the treated area cannot exceed 1 hour in a 24 hour period or until restricted-entry interval is over **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval REI(s) specified in the table found in the booklet.

Do not inhale product or spray. This product is mildly irritating to eyes. Wash hands and exposed skin before eating, drinking or smoking. Thoroughly clean application equipment after use. Do not contaminate domestic or irrigation waters. Do not store in contact with foodstuffs.

Do not apply using handheld mist blowers and handheld fogging equipment. **DO NOT** apply using aerial application equipment.

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 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. Medical personnel should contact FMC of Canada Limited's medical information services, toll-free **1-800-331-3148**.

For info about the ENVIRONMENTAL PRECAUTIONS please refer to the booklet.

DISPOSAL:

1. Empty bag.
2. Follow provincial/territorial instructions for any required additional cleaning of the bag prior to its disposal.
3. Make the empty bag unsuitable for further use.
4. Dispose of the bag in accordance with provincial/territorial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for cleanup of spills.

NOTICE TO USER: This control product is to be used only in accordance with the directions on this 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.

ROVRAL® is a trademark of FMC Corporation or an affiliate.

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REIs for Iprodione

Crop	Re-entry Activity	Restricted-entry Interval
Greenhouse lettuce	All tasks	12 hours
Conifer seedlings (greenhouse)	All tasks	1 day
Conifer seedlings (outdoors)	All tasks	12 hours
Soil drench ornamentals (control of damping-off caused by <i>Rhizoctonia</i>) (potted ornamentals and cut flowers) (greenhouse and outdoors)	All tasks	12 hours
Ornamental foliar use (control of <i>Botrytis</i> spp.) (non-cut flowers) (greenhouse and outdoors)	All tasks (except handline irrigation)	12 hours
	Handline irrigation	18 days

Do not inhale product or spray. This product is mildly irritating to eyes. Wash hands and exposed skin before eating, drinking or smoking. Thoroughly clean application equipment after use. Do not contaminate domestic or irrigation waters. Do not store in contact with foodstuffs.

Do not apply using handheld mist blowers and handheld fogging equipment. **DO NOT** apply using aerial application equipment.

CAUTION: Do not graze the treated crops or use for feed or fodder; sufficient data are not available to support such use.

GENERAL DIRECTIONS FOR USE

As this pesticide 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.

To protect pollinators, follow the instructions regarding bees in the Environmental Hazards section.

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.

Spray Buffer zones:

Spot treatments using handheld equipment **DO NOT** require a spray buffer zone.

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	Spray Buffer Zones (metres) Required for the Protection of Freshwater Habitats of Depths:	
		Less than 1 m	Greater than 1 m
Field sprayer	Outdoor ornamentals, conifer seedlings	2	1

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.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticide portion of the Canada.ca website.

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 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.

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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. Medical personnel should contact FMC of Canada Limited's medical information services, toll-free 1-800-331-3148.

ENVIRONMENTAL PRECAUTIONS:

Treated seed is toxic to birds and small wild mammals. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil surface.

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

TOXIC to birds.

TOXIC to bees. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to the early morning or the evening when most bees are not foraging. Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. To further minimize exposure to pollinators, refer to the complete guidance "Protecting Pollinator during Pesticide Spraying – Best Management Practices" on the Health Canada website (<https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pestmanagement/growers-commercial-users/pollinator-protection.html>).

To reduce runoff from treated areas into aquatic habitats avoid application to areas with 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.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

Toxic to certain beneficial insects. May harm certain beneficial insects, including those used in greenhouse production.

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

DISPOSAL:

1. Empty bag.
2. Follow provincial/territorial instructions for any required additional cleaning of the bag prior to its disposal.
3. Make the empty bag unsuitable for further use.
4. Dispose of the bag in accordance with provincial/territorial requirements.
5. For information on the disposal of unused, unwanted product, contact the manufacturer or provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for cleanup of spills.

NOTICE TO USER: This control product is to be used only in accordance with the directions on this 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.

DIRECTIONS FOR USE:

For application through field or orchard sprayers, put one half the required water volume in the tank, stir in Rovral® Fungicide Wettable Powder and add the remainder of the water. For use through knapsack or small sprayers, first stir the required amount of Rovral® Fungicide Wettable Powder with water in a bucket, add this suspension to the partly filled spray tank, then add the remainder of the water.

Ensure mixing is complete and agitate thoroughly before each application and continue to agitate during spraying.

A prepared spray mixture should be used as soon as possible in the same day, especially if the water used for mixing is alkaline (greater than pH of 7).

To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

Tank Mixes:

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.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact FMC of Canada Limited at 1-833-362-7722 for information before applying any tank mix that is not specifically recommended on this label.

LETTUCE (GREENHOUSE) - CONTROL OF GREY MOLD/SCLEROTINIA DROP

RATE: 2 kg/ha of Rovral® Fungicide Wettable Powder in 2000 L water per hectare. Use a high volume sprayer.

TIMING: Apply a maximum of 1 application per year at the 3-leaf stage. Observe a PHI of 14 days.

FOR IMPORTATION OF TREATED CARROT SEED - CONTROL OF SEED BORNE ALTERNARIA

DO NOT treat carrot seeds in Canada.

RATE: 521 g of Rovral® Fungicide Wettable Powder per 100 kg seed (260.5 g a.i./100 kg seed)

Treated seed bags must be labelled or tagged with the following instructions for workers planting treated seed. If seed is not bagged, then the following information must be provided in writing to the farmer through another means, such as a pamphlet:

For all activities involving handling of treated seeds (including planting), wear a long-sleeved shirt, long pants, chemical-resistant gloves, and a NIOSH-approved N95 (minimum) filtering facepiece respirator (dust mask) that is properly fit-tested. Closed cabs must be used for planting treated seeds. Respirators and chemical-resistant gloves are not required to be worn within the closed cab as long as the cab is equipped with equivalent respiratory protection (dust/mist filtering and/or vapour/gas purification system), but need to be available when exiting the cab for calibration, repair or cleaning of equipment.

ORNAMENTALS - CONTROL OF BOTRYTIS

spp. NOT FOR FOLIAR USE ON CUT FLOWERS

RATE: 10 g Rovral® Fungicide Wettable Powder per 10 litres of water. Apply to the point of run-off, ensuring good coverage of the plants.

TIMING: Treat at the onset of Botrytis and repeat at 21 day intervals, or as necessary. Maximum number of applications is 3 per year.

To reduce the possibility of disease resistance, Rovral® Fungicide Wettable Powder **must** be alternated with other fungicides. The following species have been safely treated:

<i>Adiantum</i> spp.	<i>Hypoestes sanguinolenta</i>
<i>Apehlandra</i>	<i>Impatiens</i> spp.
<i>squarrosa</i> <i>Aralia</i>	<i>Iresineherbstii</i>
<i>elegantissima</i> <i>Aralia</i>	<i>Kalanchoe</i> spp.
<i>sieboldii</i> <i>Asparagus</i>	<i>Maranta</i> spp.
<i>sprengeri</i>	<i>Monstera deliciosa</i>
<i>Asparagus</i>	<i>borsigiana</i> <i>Neanthe bella</i>
<i>plumosus</i> <i>Azalea</i>	<i>Nepeta</i> (ginger plant)
spp.	<i>Nephrolepis</i> spp.
<i>Begonia rex</i> var. <i>Fireglow</i>	<i>Pelargonium</i> spp.
<i>Chrysanthemum</i>	<i>Peperomia caperata</i>
Spp.(all year	<i>Peperomia hederifolia</i>
round)	<i>Peperomia magnoliifolia</i>
<i>Chlorophytum</i>	<i>Philodendron scandens</i>
spp. <i>Cineraria</i>	<i>Pilea cadierei</i>
spp.	<i>Poinsettia</i> spp. <i>Primula</i>
<i>Ciccus antarctica</i>	spp. <i>Rhoicissus</i> spp.
<i>Croton</i> spp var.	<i>Ruellia makoyana</i>
<i>Bravo</i> <i>Cyclamen</i>	<i>Saintpaulia ionantha</i> **
spp.	<i>Saxifraga stolonifera</i>
<i>Dracaena</i> spp. var. <i>Rededge</i>	<i>Senecio macroglossus</i>
<i>Episcia cupreata</i>	<i>variegatum</i> <i>Setcreasea</i>
<i>Euonymus</i> spp.	<i>purpurea</i>
<i>Euphorbia</i>	<i>Sinningia</i> spp. (<i>Gloxinia</i>)
<i>splendens</i> <i>Ficus</i>	<i>Solanum capsicastrum</i>
spp.	<i>Rosa samantha</i>
<i>Fittonia</i> spp.	
<i>Fuchsia</i> spp.	
<i>Geranium</i> (Zonal)	
<i>Gesneria</i> spp.	
<i>Gynura</i>	
<i>sarmentosa</i>	
<i>Hedera</i> spp.	

****** Spraying Saintpaulia flowers may result in petal scorch. Tepid water should be used and the wet plants protected from direct sunlight.

Tolerance of other species should be checked on a few plants before making any large scale applications.

ORNAMENTALS - CONTROL OF DAMPING-OFF CAUSED BY RHIZOCTONIA

DO NOT spray foliage when treating for Rhizoctonia.

RATE: 2 g of Rovral® Fungicide Wettable Powder in 5 litres of water applied per square meter as a soil drench.

TIMING: Treat immediately after picking out when the risk of infection is particularly high. Maximum number of applications is 2 per year with 21 days apart.

The following species can be treated: Celosia, Salvia. Tolerance of other species should be checked on a few plants before making any large scale applications.

CONIFER SEEDLINGS (SPRUCE, FIR, HEMLOCK, CEDAR) – CONTROL OF BOTRYTIS BLIGHT:

FOR USE ON CONTAINER OR BAREROOT CONIFER SEEDLINGS IN GREENHOUSES AND CONIFER NURSERIES.

RATE: 1.5 - 2 kg Rovral® Fungicide Wettable Powder/ha in 1100 litres of water/ha. (15 - 20 grams in 11 litres water/100 m²)

TIMING: Treat at the onset of botrytis, and repeat at 21 day intervals. Do not apply more than 3 applications of Rovral® Fungicide Wettable Powder/year. Only 2 of the applications can occur while in the greenhouse. Do not apply 2 days prior to harvest. To reduce the possibility of disease resistance Rovral® Fungicide Wettable Powder must be alternated with other suitable fungicides.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Rovral® Fungicide Wettable Powder contains a Group 2 fungicide. Any fungal population may contain individuals naturally resistant to Rovral® Fungicide Wettable Powder and other Group 2 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 Rovral® Fungicide Wettable Powder or other 2 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an 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 FMC of Canada Limited if reduced sensitivity of the pathogen to Rovral Fungicide Wettable Powder 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 advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens. For further information and to report suspected resistance, contact FMC of Canada Limited representatives at 1-833-362-7722.

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