

GROUP	49	FUNGICIDE
-------	----	-----------

## ORONDIS® 200SC FUNGICIDE

### SUSPENSION CONCENTRATE

### COMMERCIAL

FOR SOIL APPLICATION TO CUCURBIT VEGETABLES, TOMATOES, PEPPERS, ASPARAGUS, CELTUDES, FLORENCE FENNELS (Fresh leaves and Stalk), KOHLRABIS, PRICKLY PEARS AND CROP SUBGROUP 13-07A: CANEBERRIES, GINSENG, POTATO AND EGGPLANTS.

### ACTIVE INGREDIENT:

Oxathiapiprolin.....200 g/L

Contains 0.00113% 5-chloro-2-methyl-4-isothiazolin-3-one as a preservative.

Contains 0.00037% 2-methyl-4-isothiazolin-3-one as a preservative.

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

REGISTRATION NO. **32104**  
PEST CONTROL PRODUCTS ACT

**NET CONTENTS:** 1 L – 1,500 LITRES

**Syngenta Canada Inc.**  
140 Research Lane, Research Park  
Guelph, Ontario N1G 4Z3  
Telephone: 1-877-964-3682

**Label**

## 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.

## FIRST AID

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

**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 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 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.

**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.

## TOXICOLOGICAL INFORMATION

Treat symptomatically.

## PRECAUTIONS

- **KEEP OUT OF REACH OF CHILDREN.**
- During mixing/loading/application/clean-up and repair, workers must wear long-sleeved shirt, long pants, socks & chemical-resistant footwear and chemical-resistant gloves.
- Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.
- Do not apply by air.
- Do not apply in greenhouses.
- 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.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

## ENVIRONMENTAL PRECAUTIONS

- Toxic to aquatic organisms.
- 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.
- 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.
- Oxathiaprolin is persistent and may carryover. It is recommended that any products containing oxathiaprolin not be used in areas treated with this product during the previous season.

## STORAGE

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed. To prevent contamination, store this product away from food or feed.

## DISPOSAL

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.

### **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 requirements.

**For Returnable Containers:**

Do not reuse this container for any purpose. For disposal, the 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.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING  
CALL 1-800-327-8633 (FASTMED)***

ORONDIS® is a trademark of a Syngenta Group Company.

<b>GROUP</b>	<b>49</b>	<b>FUNGICIDE</b>
--------------	-----------	------------------

## **ORONDIS® 200SC FUNGICIDE**

### **SUSPENSION CONCENTRATE**

### **COMMERCIAL**

FOR SOIL APPLICATION TO CUCURBIT VEGETABLES, TOMATOES, PEPPERS, ASPARAGUS, CELTUCES, FLORENCE FENNELS (Fresh leaves and Stalk), KOHLRABIS, PRICKLY PEARS AND CROP SUBGROUP 13-07A: CANEBERRIES, GINSENG, POTATO AND EGGPLANTS.

### **ACTIVE INGREDIENT:**

Oxathiapiprolin.....200 g/L

Contains 0.00113% 5-chloro-2-methyl-4-isothiazolin-3-one as a preservative.

Contains 0.00037% 2-methyl-4-isothiazolin-3-one as a preservative.

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

REGISTRATION NO. **32104**  
PEST CONTROL PRODUCTS ACT

**Syngenta Canada Inc.**  
140 Research Lane, Research Park  
Guelph, Ontario N1G 4Z3  
Telephone: 1-877-964-3682

**Pamphlet**

## 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.

## FIRST AID

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

**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 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 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.

**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.

## TOXICOLOGICAL INFORMATION

Treat symptomatically.

## PRECAUTIONS

- **KEEP OUT OF REACH OF CHILDREN.**
- During mixing/loading/application/clean-up and repair, workers must wear long-sleeved shirt, long pants, socks & chemical-resistant footwear and chemical-resistant gloves.
- Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.
- Do not apply by air.
- Do not apply in greenhouses.
- 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.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

## ENVIRONMENTAL PRECAUTIONS

- Toxic to aquatic organisms.
- 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.
- 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.
- Oxathiapiprolin is persistent and may carryover. It is recommended that any products containing oxathiapiprolin not be used in areas treated with this product during the previous season.

## STORAGE

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed. To prevent contamination, store this product away from food or feed.

## DISPOSAL

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.

### **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 requirements.

**For Returnable Containers:**

Do not reuse this container for any purpose. For disposal, the 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.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING  
CALL 1-800-327-8633 (FASTMED)***

**GENERAL INFORMATION**

ORONDIS® 200SC Fungicide is a suspension concentrate containing oxathiapiprolin, and is only for use by soil application for the control or suppression of the diseases listed on this label.

Do not follow soil applications of ORONDIS 200SC Fungicide with foliar applications of Orondis Fungicides, any other oxathiapiprolin-containing fungicides, or any other FRAC 49-containing product.

ORONDIS 200SC Fungicide is active against selective Oomycete diseases listed on this label and has preventive and antispore activity. ORONDIS 200SC fungicide is locally systemic, translaminar, and moves systemically in the xylem. ORONDIS 200SC Fungicide must be applied in a regularly scheduled protective spray program in rotation with other fungicides. See directions below for specific crop/disease recommendations.

**DIRECTIONS FOR USE**

**Cultivar/Varietal Crop Safety**

Not all crops within a crop group, and not all varieties, cultivars or hybrids of crops, have been individually tested for crop safety. It is not possible to evaluate for crop safety all applications of ORONDIS 200SC Fungicide on all crops within a crop group, on all varieties, cultivars, or hybrids of those crops, or under all environmental conditions and growing circumstances. To test for crop safety, apply the product in accordance with the label instructions to a small area of the target crop to ensure that a phytotoxic response will not occur, especially where the application is a new use of the product by the applicator.

**Tank Mixtures:**

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 Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) for information before applying any tank mix that is not specifically recommended on this label.

Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank-mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

Always read and follow label directions including WALES mixing order.

### **MIXING INSTRUCTIONS:**

1. Ensure that the sprayer interior is clean, then fill the spray tank with  $\frac{1}{2}$  the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add ORONDIS 200SC and any additional SE or SC formulation mix partners and agitate to ensure complete mixing.
4. Add any EC formulation mix partners and agitate to ensure complete mixing.
5. Fill the tank to  $\frac{3}{4}$  the required amount of water.
6. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
7. Finish filling the sprayer with water, maintaining good agitation.
8. After any break in spraying operations, agitate thoroughly before spraying again.
9. Spray the pesticide suspension the same day as mixing.
10. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

### **SPRAYER CLEAN-UP:**

#### Before Spraying:

- Prior to using ORONDIS 200SC, ensure that the spray tank, lines and filter are thoroughly clean.

#### After Spraying:

- Thoroughly clean application equipment immediately after spraying. **DO NOT** allow ORONDIS 200SC residue to dry within the spray tank. When using tank mixes, consult the tank-mix

partner label for additional clean-up instructions.

- The following recommendations are provided:
  1. Drain and flush tank walls, boom and all hoses for ten minutes with a clean water/detergent mixture. Rinse with clean water. **DO NOT** clean the sprayer near desirable vegetation, wells or other water sources.
  2. Remove all nozzles and screens and wash separately.
  3. Dispose of all rinsate in accordance with provincial regulations.

## EQUIPMENT SPECIFIC INSTRUCTIONS

For suppression or control of soil borne diseases, as recommended in this label, ORONDIS 200SC Fungicide must be applied in a manner that ensures the product solution adequately saturates the target crop root/crown zone.

For soil application, apply ORONDIS 200SC Fungicide using drip application, surface band or directed application, or in-furrow application. IN ALL CASES: If the application method does *not* move the product to the target root/crown disease zone, the application **MUST** be followed with irrigation or cultivation to correctly place the product for disease control.

**Soil Broadcast Application:** **DO NOT** apply during atmospheric conditions of thermal inversion which are characterized by dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply spray droplets which are smaller than the American Society of Agricultural and Biological Engineers fine (classification ASABE Standard S-572.1). Boom height must be 60 cm or less above the crop or ground.

## SPRAYING INSTRUCTIONS:

1. Water Volume: Apply in a minimum spray volume indicated in the crop and pest specific instructions tabulated below.
2. Sprayer Agitation: Use a jet agitator or liquid sparge tube which recirculates 7-10% of the tank per minute. **DO NOT** use an air sparger.
3. Pump: Screens should be used to protect the pump and prevent clogging. **DO NOT** place a screen in the recirculation line. Use 50 mesh or *coarser* screens between the pump and boom unless directed otherwise by the sprayer manufacturer.
4. Spray Nozzles: Use dedicated soil, flood, or stream type nozzles designed for large carrier volume application. Selected air induction nozzles may also be suitable, if recommended for soil application by the manufacturer. Use 50 mesh nozzle screens or as recommended by the nozzle manufacturer.
5. Pressure: As recommended by the nozzle manufacturer to achieve no smaller than ASABE fine sized droplets.
6. Apply at uniform speed and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to avoid potential crop injury from over application.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in overly fine particles (mist). **DO NOT** apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. **DO NOT** spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

**Surface Band or Directed Application:** Apply in a 10-30 cm (4-12 inch) band in a minimum spray volume indicated in the crop and pest specific instructions tabulated below. Follow

application with cultivation or irrigation 1.25 - 2.5 cm (0.5 - 1 inch) to move ORONDIS 200SC Fungicide to the target disease zone.

**Crown Soak Application (Caneberries and Asparagus):** Use 40 liters of solution, or the volume required to fully submerge 100 crowns. To determine the amount of product needed to treat 100 crowns, first determine the number of plants per hectare using typical plant spacing. Then use the following formula:  $100 \div \text{plant density per ha} \times 1400 \text{ ml} = \text{product needed to treat 100 crowns in 40 litres of solution}$ .

**Application through irrigation equipment (CHEMIGATION):** This product MAY ONLY be applied through lower pressure micro sprinklers and surface laid drip irrigation AND ONLY at rates specified on this label. **DO NOT** apply this product through any other type of irrigation system, including permanent sub-surface drip irrigation system (ie drip tape buried beneath more than 15 cm of soil). This product MAY BE applied through surface type drip irrigation tape buried up to 15 cm of soil. **DO NOT** apply ORONDIS 200SC through any irrigation system which is physically connected to a public water system. ORONDIS 200SC may be applied through irrigation systems, which may be **supplied** by a public water system **only if** the water is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The irrigation system **must provide uniform distribution of treated water**. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system **must be calibrated to uniformly apply the rates specified**. If you have questions about calibration, contact your equipment manufacturers or distributor. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Dilute ORONDIS 200SC in the solution tank at a ratio of at least 5 parts of water to one part of ORONDIS 200SC. Injecting a larger volume of a more dilute solution will usually allow a more accurate calibration of the metering equipment. Meter the pesticide into the irrigation water during the irrigation cycle.

### **Operating Instructions for All Labeled Types of Irrigation Systems**

1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact the equipment manufacturer.
2. The system must contain a functional check-valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
6. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
7. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump or Venturi injector), effectively designed and constructed of materials that

- are compatible with pesticides and capable of being fitted with a system interlock.
8. Do not apply when wind speed favors drift beyond the area intended, except in drip chemigation.
  9. The pesticide injection pipeline must be on the downstream (field) side of the system filters to avoid potential pesticide off-site contamination or misapplication as a result of the filter backflushing process.
  10. Have a dedicated pesticide injection tank for chemigation purposes rather than tank-mixing pesticides with fertilizers or other non-pesticide chemigation products. This reduces the potential for incompatibility issues which could result in misapplication.
  11. Make ORONDIS 200SC injections into the center of the water pipe for a thorough and quick mix. This can be accomplished with an "injection tube" which should contain a check valve.

### **Specific LOW PRESSURE MICRO SPRINKLERS AND DRIP IRRIGATION Instructions:**

ORONDIS 200SC must be applied on the schedule specified in the tabulated crop and pest specific directions for use, not according to the irrigation schedule. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through low-pressure microsprinkler or drip type irrigation equipment. Check with provincial and other applicable regulatory agencies for potential use restrictions before applying any agricultural chemicals through irrigation equipment.

1. Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water.
2. Use only pressure injection or Venturi equipment.
3. Determine the area to be treated in each irrigation run.
4. Measure the output of each of the emitters or drip tubes closest to and farthest from the injection point.
5. For calibration, substitute a concentrated laundry detergent for the ORONDIS 200SC mixture in the injector (solution) tank. It is important to use the same volume of soap solution as the planned volume of ORONDIS 200SC solution when calibrating the system. The detergent will bubble as it leaves the emitters. Check the time period over which the bubbles occur for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate.

### **Step-by-Step Calibration and Application Instructions**

1. Before starting to calibrate, operate the system until all of the emitters are putting out at equal flow rates or until the system is operating at full pressure.
2. Make up an indicator solution of detergent, using the same rate of indicator as the planned volume of ORONDIS 200SC to be used in the mix.
3. Set the injector to apply the indicator solution at the injection rate to be used in the actual ORONDIS 200SC application.
4. Attach a 30 cm length of flexible tubing over the emitter closest to the injection point, another 30 cm length over the emitter farthest away. Both emitters should be monitored to determine the time intervals that the indicator solution is observed.
5. Begin injecting the indicator solution. Direct the flow from the flexible tubes into a small container. Begin timing when the indicator solution is first detected. Stop timing when the indicator solutions are no longer detected in the container.
6. If the period of detection of the indicator solution between the near and far emitter is within 2 minutes, comparable coverage will be obtained. If they are not, make adjustments by

increasing the dilution ratio, ie using more than a 5:1 ratio of water to ORONDIS 200SC, or adjust the injector to a slower flow rate.

7. Once the system is calibrated, dilute the needed amount of ORONDIS 200SC with water and any other tank mix partners in the injection tank at a minimum dilution of 5 parts water to 1 part ORONDIS 200SC. Follow the directions for mixing and equipment set up in the **Mixing Instructions** section of this label for complete details.
8. Do not begin to inject ORONDIS 200SC into the system until all emitters are producing equal flow rates, or until the system is at full pressure.
9. Inject the ORONDIS 200SC solution into the system at the beginning of the irrigation set in 1.5-2.5 cm of irrigation water.

**ORONDIS 200SC Fungicide will control the indicated diseases unless stated otherwise.**

**Not for foliar use.**

**USE DIRECTIONS**

<b>Crops</b>	<b>Potatoes</b>
<b>Diseases Suppressed</b>	<b>Pink rot (<i>Phytophthora erythroseptica</i>)</b>
<b>Use rate</b>	3.2 mL/100 m row
<b>Application Timing/Instructions</b>	Apply once as an in-furrow spray in 40 L per hectare of water at planting. Mount spray nozzle so the spray is directed into the furrow as a 15-20 cm band just before the seed is covered.
<b>Minimum recommended application water volume</b>	40 L/ha
<b>Maximum number of applications per season</b>	1
<b>Maximum rate of active ingredients applied</b>	85 g ai/ha of oxathiapiprolin
<b>Re-entry Interval (REI)</b>	12 hours after application
<b>Pre harvest interval (PHI)</b>	Not applicable
<b>Specific Use Restrictions:</b>	
1. Do not follow soil applications of ORONDIS 200SC Fungicide with foliar applications of Orondis Fungicides, any other oxathiapiprolin-containing fungicides, or any other FRAC 49-containing product.	

<b>Crops</b>	<b>Ginseng</b>
<b>Diseases Controlled</b>	<b>Phytophthora root rot (<i>Phytophthora cactorum</i>)</b>
<b>Use rate (product/ha)</b>	0.525 L/ha (105 g ai/ha)
<b>Application Timing/Instructions</b>	Apply ORONDIS 200SC Fungicide as a soil broadcast application prior to the emergence of ginseng in the spring. If possible, irrigate the field/treated area prior to application to wet the straw. Time the soil broadcast application of ORONDIS 200SC Fungicide immediately prior to rainfall to help move ORONDIS 200SC Fungicide into the root zone. If a minimum 1 cm of rainfall does not occur within an hour after application, the field/treated area should be irrigated overhead.
<b>Minimum recommended application water volume</b>	1000 L/ha
<b>Maximum number of applications per season</b>	1
<b>Maximum rate of active ingredients applied</b>	105 g ai/ha of oxathiapiprolin
<b>Re-entry Interval (REI)</b>	12 hours after application
<b>Pre harvest interval (PHI)</b>	Not applicable
<b>Specific Use Restrictions:</b>	
Do not follow soil applications of ORONDIS 200SC Fungicide with foliar applications of oxathiapiprolin-containing fungicides. Use either soil applications or foliar applications, but not both for the control of relevant diseases.	

**CUCURBIT VEGETABLES – Crop Group 9**

<b>Crops</b>	<b>Cucurbit vegetables</b> Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); <i>Momordica</i> spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon
<b>Diseases Controlled</b>	Phytophthora Blight – soil phase <i>Phytophthora capsici</i> )
<b>Use rate (product/ha)</b>	0.35 to 1.4 L/ha
<b>Application Timing/Instructions</b>	Apply at plant, in furrow, drip or in transplant water.  Use the higher rates for heavier soils, for longer application intervals, or for susceptible varieties.  The minimum soil application interval is 7 days.
<b>Minimum recommended application water volume</b>	200 L/ha
<b>Maximum number of applications per season</b>	4
<b>Maximum rate of active ingredients applied</b>	560 g ai/ha of oxathiapiprolin
<b>Re-entry Interval (REI)</b>	12 hours after application
<b>Pre harvest interval (PHI)</b>	0 days
<b>Specific Use Restrictions:</b>	Do not follow soil applications of ORONDIS 200SC Fungicide with foliar applications of Orondis Fungicides, any other oxathiapiprolin-containing fungicides, or any other FRAC 49-containing product.  Use either soil applications or foliar applications but not both to control the relevant disease.  Make no more than 2 sequential applications of ORONDIS 200SC Fungicide before switching to a fungicide with a different mode of action.  Where less than three (3) fungicide applications are made, make no more than one (1) application of ORONDIS 200SC Fungicide (or any other FRAC 49-containing product).  When three (3) or more fungicide applications are made, use oxathiapiprolin-containing products in no more than thirty-three percent (33%) of the total number of fungicide applications, with a maximum of four (4) applications per crop (i.e. in case of 12 or more applications in total per year).



**TOMATO, PEPPER, EGGPLANT**

<b>SITE</b>	<b>Tomato, Pepper (bell, non-bell), Eggplant</b>
<b>PEST</b>	Phytophthora Blight – soil phase ( <i>Phytophthora capsici</i> )
<b>RATE ORONDIS 200SC FUNGICIDE/HA</b>	0.35 to 1.4 L/ha
<b>SPECIFIC DIRECTIONS</b>	Apply at plant, in furrow, drip or in transplant water.  Use the higher rates for heavier soils, for longer application intervals, or for susceptible varieties  The minimum soil application interval is 7 days.
<b>Minimum recommended application water volume</b>	200 L/ha
<b>Maximum number of applications per season</b>	4
<b>Maximum rate of active ingredients applied</b>	560 g ai/ha
<b>Re-entry Interval (REI)</b>	12 hours after application
<b>Pre harvest interval (PHI)</b>	0 days
<b>Specific Use Restrictions:</b>	Do not follow soil applications of ORONDIS 200SC Fungicide with foliar applications of Orondis Fungicides, any other oxathiapiprolin-containing fungicides, or any other FRAC 49-containing product. Use either soil applications or foliar applications but not both to control the relevant disease.  Make no more than 2 sequential applications of ORONDIS 200SC Fungicide before switching to a fungicide with a different mode of action.  Where less than three (3) fungicide applications are made, make no more than one (1) application of ORONDIS 200SC Fungicide (or any other FRAC 49-containing product).  When three (3) or more fungicide applications are made, use oxathiapiprolin-containing products in no more than thirty-three percent (33%) of the total number of fungicide applications, with a maximum of four (4) applications per crop (i.e. in case of 12 or more applications in total per year).

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

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than the Syngenta Canada Inc. and accepted for registration by Health Canada. The Syngenta Canada Inc. itself makes no representation or warranty with respect to product performance (efficacy) and crop tolerance (phytotoxicity) of this product when used on the crops listed below. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold the Syngenta Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the uses described below.

SITE	PEST	RATE ORONDIS Fungicide/ha	SPECIFIC DIRECTIONS
<p>Asparagus</p> <p>Celtuce</p> <p>Florence Fennel (fresh leaves &amp; stalk)</p> <p>Kohlrabi</p> <p>Prickly pear</p> <p>Cultivars, varieties, and hybrids of these commodities</p>	<p>Spear, crown or root rot (<i>Phytophthora spp.</i>)</p> <p>Phytophthora rot (<i>Phytophthora spp.</i>)</p> <p>Brown rot and wilt (<i>Phytophthora spp.</i>)</p> <p>Phytophthora rot (<i>Phytophthora spp.</i>)</p> <p>Foot rot (<i>Phytophthora spp.</i>)</p>	<p>0.7 - 1.4 L/ha</p>	<p><b>New Plantings of transplants &amp; bulbs:</b> Apply a transplant drench prior to plant. See specific soil application directions in this label. For transplanting crowns, apply a crown soak. See specific crown soak application directions in this label. Make a crown soak solution in a large enough container to ensure that the crowns are fully submerged. Rinse excessive soil or sand from crowns prior to soak. Place crowns in fungicide solution and soak for a minimum of 10 minutes. Ensure the solution remains in suspension by using agitation. After soaking, remove from solution, drain and then plant the crowns.</p> <p><b>Established Plantings:</b> Directly apply to soil with a banded drench application at a minimum of 200L/ha. Follow by sprinkler or drip irrigation within 24 hours to adequately distribute the product to the root zone. If needed, re-apply using a 7-14 day interval. See specific soil application directions in this label.</p>

**RESTRICTIONS AND PRECAUTIONS:**

- Make no more than 2 sequential applications of ORONDIS fungicide before switching to a fungicide with a different mode of action. Do not use ORONDIS fungicide for more than 33% of the total foliar fungicide applications.
- Do not make more than 2 applications (low rate) or 4 applications (high rate) per year.
- Maximum seasonal use rate is 2.8 L/ha.
- Minimum time (PHI) between application and harvest is 0 days.
- For any of the pests listed above, use the high rate under heavy pest pressure.

**Crop Subgroup 13-07A: Caneberries**

SITE	PEST	RATE ORONDIS Fungicide/ha	SPECIFIC DIRECTIONS
Blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora), Loganberry, Raspberry (black, red and wild raspberry) and cultivars, varieties or hybrids of these)	Root rot ( <i>Phytophthora spp.</i> )	0.7 - 1.4 L/ha	Directly apply to soil with a banded drench application at a minimum of 200L/ha, continue on a 7-14 day interval. Follow by sprinkler or drip irrigation within 24 hours to adequately distribute the product to the root zone. See specific soil application directions in this label. Use higher rate and shorter interval when disease pressure is high. Use 1-2 applications at 7-14 days apart made in spring and 1-2 applications at 7-14 days apart made in fall.

**RESTRICTIONS AND PRECAUTIONS:**

- Make no more than 2 sequential applications of ORONDIS fungicide before switching to a fungicide with a different mode of action. Do not use ORONDIS fungicide for more than 33% of the total foliar fungicide applications.
- Do not make more than 2 applications (high rate) or 4 applications (low rate) per year.
- Maximum seasonal use rate is 2.8 L/ha.
- Minimum time (PHI) between application and harvest is 1 day.

**CROP ROTATION**

For all legume crops except succulent peas, a plant-back interval of 180 days is required. All other crops may be planted immediately following the last application.

**INTEGRATED PEST MANAGEMENT**

Syngenta Canada Inc. recommends the use of Integrated Pest Management (IPM) programs to control pests.

ORONDIS 200SC Fungicide may be used as part of an IPM program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when disease forecasting models reach locally determined action levels. Consult your provincial extension service, professional consultants, or other qualified authorities to determine the appropriate management, cultural practice and treatment threshold levels for the specific crop, geography and diseases.

## RESISTANCE MANAGEMENT

ORONDIS 200SC Fungicide contains the active ingredient oxathiapiprolin which is listed as Group 49 by the Fungicide Resistance Action Committee (FRAC). Oxathiapiprolin inhibits the oxysterol-binding protein (OSBP). Any fungal population may contain individuals naturally resistant to ORONDIS 200SC Fungicide. 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/bactericide resistance:**

Where possible, rotate the use of ORONDIS 200SC Fungicide or other fungicides containing Oxathiapiprolin with different mode of action groups that control the same pathogens.

Use tank mixtures with fungicide/bactericides from a different group that is effective on the target pathogen when such use is permitted. Do not tank mix ORONDIS 200SC Fungicide with any fungicide for which resistance to the target disease has developed.

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.

Where possible, make use of predictive disease models to effectively time fungicide applications.

Monitor treated fungal populations for resistance development. Notify Syngenta Canada Inc. if reduced sensitivity of the pathogen to ORONDIS 200SC 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.

Make no more than 2 sequential applications of ORONDIS 200SC Fungicide before rotating to a fungicide with a different mode of action.

Do not follow soil applications of ORONDIS 200SC Fungicide with foliar applications of ORONDIS Fungicide or other oxathiapiprolin-containing fungicides. Different application methods (foliar and soil) must not be combined when protecting a crop during a growing season.

Do not use ORONDIS 200SC Fungicide for more than 33% of the total fungicide soil applications per season per crop.

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 or to report suspected resistance, contact company representatives at 1-877-SYNGENTA (1-877-964-3682) or at [www.syngenta.ca](http://www.syngenta.ca).