GROUP 49 40 FUNGICIDE

# **ORONDIS®** Ultra Fungicide

#### SUSPENSION CONCENTRATE

# **COMMERCIAL**

FOR USE ON LABELLED CROPS

#### **ACTIVE INGREDIENTS:**

Oxathiapiprolin	30	g/L
Mandipropamid	. 250	g/L

Contains 1,2-benzisothiazolin-3-one at 0.044% and 2-bromo-2-nitropropane-1,3-diol at 0.027% OR 1,2-benzisothiazolin-3-one at 0.00133% and 2-bromo-2-nitropropane-1,3-diol at 0.027% PLUS 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00091% AND 2-methyl-4-isothiazolin-3-one at 0.00030% as preservatives.

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

REGISTRATION NO.: 32805
PEST CONTROL PRODUCTS ACT

NET CONTENTS: 0.5 L - 1500 L

#### Syngenta Canada Inc.

140 Research Lane, Research Park Guelph, Ontario N1G 4Z3 Telephone: 1-877-964-3682

Label

# 1.0 NOTICE TO USER

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

#### 2.0 FIRST AID

**IN CASE OF POISONING,** contact a physician or a poison control centre **IMMEDIATELY**. 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.

# 3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote. Treat symptomatically.

#### 4.0 PRECAUTIONS

Harmful if swallowed. KEEP OUT OF REACH OF CHILDREN.

Keep unused product in original container tightly closed, locked up and away from food and feed.

**RESTRICTED ENTRY INTERVAL (REI):** Do not enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.

DO NOT apply using handheld mist blower or handheld fogging equipment.

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.

# 5.0 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. Wear a NIOSH-approved N95 (minimum) filtering facepiece respirator (dust mask) that is properly fit tested during all job activities. Gloves are not required during application within a closed cab or cockpit.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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

All users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

All users should wash hands after using ORONDIS<sup>®</sup> Ultra Fungicide for example before eating, drinking, smoking, using the toilet or using a handheld device.

#### 6.0 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. DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats. 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.

Apply only when the potential for drift to areas of human habitation or 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.

#### 7.0 STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals. To prevent contamination store this product away from food or feed.

#### 8.0 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 cleanup 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)

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# **Pamphlet**

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# 1.0 NOTICE TO USER

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Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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#### 6.0 ENVIRONMENTAL PRECAUTIONS

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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. DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats. 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.

Apply only when the potential for drift to areas of human habitation or 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.

#### 7.0 STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals. To prevent contamination store this product away from food or feed.

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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)

# 9.0 PRODUCT INFORMATION

ORONDIS Ultra Fungicide is active against oomycete diseases listed on this label and has preventive and antisporulant activity. ORONDIS Ultra Fungicide must be applied in a regularly scheduled protective spray program in rotation with other fungicides. See directions below for specific crop/disease recommendations.

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

ORONDIS Ultra Fungicide penetrates into plant tissues and is rainfast within 1 hour after application or when dry.

ORONDIS Ultra Fungicide can be applied with specified ground and aerial equipment using sufficient water to obtain thorough coverage of plants.

# 9.1 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 Ultra 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.

# 9.2 General Use Precautions

# FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

Apply the higher rate and shorter interval under conditions of high disease pressures.

Follow directions regarding the maximum number of successive applications for each use outlined in the Use Directions Tables.

#### 10.0 DIRECTIONS FOR USE

#### 10.1 General Information

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

**DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuarine/marine habitats.

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

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-87-SYNGENTA (1-877-964-3682) or obtain technical advice from the distributor or your provincial agricultural representative.

#### 10.2 Greenhouse Application

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

# 10.3 Transplant Application

<u>Transplant water application:</u> Transplants should be adequately watered before transplanting. Ensure transplant water volume is sufficient to thoroughly wet the rootzone. Ensure 125-250 mL transplant water/transplant depending on sandy (125 to 250 mL) or silty soil (175 to 250 mL).

For water wheel transplanters, use the plant population to determine the rate per plant.

# 10.4 Ground Application

#### 10.4.1 General Precautions

It is important to check the physical compatibility of tank mixed pesticide products in a small volume prior to filling the sprayer. Check the compatibility of tank mixes containing ORONDIS Ultra Fungicide using a jar test with proportionate amounts of mix partners, and water, before mixing in the spray tank.

<u>Field sprayer application:</u> **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 and Biological Engineers (ASABE) medium classification. Boom height must be 60 cm or less above the crop or ground.

# **10.4.2 Mixing Instructions**

- 1. Ensure that the sprayer interior is clean, then fill the spray tank with ½ 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 Ultra Fungicide and agitate to ensure complete mixing.
- 4. Add any SE or SC formulation mix partners and agitate to ensure complete mixing.
- 5. Add any EC formulation mix partners and agitate to ensure complete mixing.
- 6. Fill the tank to 3/4 the required amount of water.
- 7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
- 8. Finish filling the sprayer with water, maintaining good agitation.
- 9. After any break in spraying operations, agitate thoroughly before spraying again.
- 10. Spray the pesticide suspension the same day as mixing.
- 11. 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.

# 10.4.3 Spraying Instructions

- 1. <u>Water Volume:</u> Apply in a minimum spray volume of 100 L/ha OR the volume given in the crop and pest specific instructions tabulated below, whichever is LARGER.
- 2. <u>Sprayer Agitation:</u> Use a jet agitator or liquid sparge tube which recirculates 7-10% of the tank per minute. **DO NOT** use an air sparger.
- 3. <u>Pump:</u> Screens should be used on the suction side of the pump for protection and to 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: 80° or 110° flat fan incorporating a drift reducing technology wherever

feasible. Use 50 mesh nozzle screens or as recommended by the nozzle manufacturer. **DO NOT** use flood type nozzles, controlled droplet application equipment, spray foils or hollow cone nozzles.

- 5. <u>Pressure:</u> As recommended by the nozzle manufacturer to achieve the target spray quality. DO NOT apply finer than ASABE fine quality sprays.
- 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.

# 10.4.4 Equipment Clean-Up

# Before Spraying:

 Prior to using ORONDIS Ultra Fungicide, ensure that the spray tank, lines and filter are thoroughly clean.

# After Spraying:

- Thoroughly clean application equipment immediately after spraying. DO NOT allow ORONDIS Ultra Fungicide 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.

# 10.5 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.

# 10.5.1 Spraying Instructions

- 1. <u>Water Volume:</u> Apply in a minimum spray volume of 200 L/ha OR the volume given in the crop and pest specific instructions tabulated below, whichever is LARGER.
- 2. <u>Spray Quality:</u> Select nozzles and pressure to achieve a minimum of ASABE fine sized droplets.
- 3. <u>Spray Distribution:</u> Select nozzles, orient deflectors, and adjust air speed and volume to ensure only the canopy is sprayed. Spray should just reach the top of the target. Account for the shape and canopy density of the target when setting spray distribution.
- 4. 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.

# 10.6 Aerial Application

#### 10.6.1 General Precautions

<u>Aerial Application:</u> DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural and Biological Engineers (ASABE) fine classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions, and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. When no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

# 10.6.2 Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in 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.

#### **10.6.3 Operator Precautions**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing/loading, clean-up and repair. Wear a NIOSH-approved N95 (minimum filtering face piece respirator (dust mask) that is properly fit tested during all job activities. Gloves are not required during application within a closed cockpit.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

It is important to check the physical compatibility of tank mixed pesticide products in a small volume prior to filling the sprayer. Check the compatibility of tank mixes containing ORONDIS Ultra Fungicide using a jar test with proportionate amounts of mix partners, and water, before mixing in the spray tank.

#### 10.6.4 Pilot Precautions

Read and understand the entire label before using this product. Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides. Suggested conditions for good aerial application are moderate temperatures (less than 25 °C) and moderate relative humidity (greater than 40%). Light winds at altitude of 3-16 km/h are preferred, with 3-9 km/h considered optimal. Ensure uniform application and a uniform spray with minimum potential for drift. To avoid streaked, uneven or overlapped application, use appropriate marking technology. GPS based marking is preferred.

**DO NOT** apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas.

**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 when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply spray droplets which are smaller than the American Society of Agricultural and Biological Engineers medium classification (ASABE Standard S-572.1). The nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing or rotor span in order to reduce drift caused by turbulent wingtip vortices.

# **10.6.5 Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-87-SYNGENTA (1-877-964-3682) or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum spray volume of 45 litres per hectare.

Refer to ENVIRONMENTAL PRECAUTIONS for additional details.

Avoid spraying when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

DO NOT overspray non-target terrestrial or aquatic habitats. DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches, and wetlands), estuaries or marine habitats. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

# **10.6.6 Mixing Instructions**

Mixing this product directly in the aircraft hopper **IS NOT** recommended. The use of chemical handling or managing equipment to load the hopper **IS** recommended. This product **MAY BE** inducted into a hopper which is prefilled with water or when the product and water are mixed prior to entering the hopper. This product **MAY BE** batch mixed and pumped into the hopper. In all cases the chemical handling equipment and hopper interior must be clean prior to use.

**NOTE:** WG and DF formulations are preferentially batch mixed.

**NOTE:** SC, SN, and SL formulations may be inducted or batch mixed.

**NOTE:** EC formulations are preferentially batch mixed.

It is **NOT** recommended to combine solid (WG or DF) formulations with liquid tank mix partners within a single batch. Batch mix WG or DF formulations first, pump into the hopper, and then add liquid tank mix partners by induction or as an additional batch mix. When tank mixing multiple products, follow the mixing order outlined below:

- 1. Pump water into the hopper to at least ¼ to ½ of the desired spray volume. Engage hopper circulation, if possible.
- 2. Thoroughly batch mix any WG or DF formulation mix partners and agitate to ensure complete mixing. Pump into the hopper.
- 3. Induct or thoroughly batch mix ORONDIS Ultra Fungicide and any additional SE or SC formulations.
- 4. Thoroughly batch mix any EC formulation mix partners. EC formulations may be added to the batch from Step 3, if desired.
- 5. Induct or thoroughly batch mix any solution (SN or SL) formulation mix partners. SN/SL formulations may be added to the batch from Step 3, if desired.
- 6. Pump batch mixed SC, EC, and/or SN/SL products into the hopper.
- 7. Finish filling the hopper with water.
- 8. If it was not possible to engage hopper agitation in Step 1, do so as soon as possible once airborne.
- 9. Spray the pesticide suspension the same day as mixing.
- 10. Do not mix, load or clean equipment where there is a potential to contaminate wells or aquatic systems.

# 10.6.7 Spraying Instructions

- 1. <u>Water Volume:</u> Apply in a minimum spray volume of 45 L/ha OR the volume given in the crop and pest specific instructions tabulated below, whichever is LARGER.
- 2. <u>Spray Nozzles:</u> Use only ASABE medium or coarse nozzles rated as delivering droplets of volume median diameter of 300 microns or greater.
- 3. <u>Pressure:</u> As recommended by the nozzle manufacturer to achieve ASABE medium or coarse sized droplets.
- 4. Ensure hopper agitation is engaged whenever possible during flight.

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.

# 10.6.8 Equipment Clean-Up

# Before Spraying:

• Prior to using ORONDIS Ultra Fungicide, ensure that the hopper, chemical handling equipment, lines and filter are thoroughly cleaned.

# After Spraying:

- Thoroughly clean application equipment immediately after spraying. DO NOT allow ORONDIS Ultra Fungicide residue to dry within application equipment.
- 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 application equipment 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.

10.7 Rotational Crop Restrictions

Crop, Crop Group, or Crop Subgroup	Plant-back Interval (days)
Brassica, Head and Stem (Subgroup 5A)	
Bulb Vegetables	
Cucurbit Vegetables (Group 9)	
Fruiting Vegetables	
Ginseng	0
Leafy Greens (Subgroup 4A)	0
Hops	
Basil	
Beans, Edible-Podded	
Tuberous and Corm Vegetables (Subgroup 1C)	
All other crops not listed	30
Legume Vegetables, except succulent peas	180

#### 11.0 CROP USE DIRECTIONS

#### 11.1 Tank Mixtures

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) for information before mixing any pesticide or fertilizer that is not specifically recommended on this label.

When applied as a tank-mix combination, read and observe all label directions, including rates, personal protective equipment, restrictions and precautions for each product used in the tank-mix. Always use in accordance with the most restrictive label restrictions and precautions.

# ORONDIS Ultra Fungicide will control the indicated diseases unless stated otherwise.

# 11.2 Use Directions - Potatoes

Crops	Potatoes
Disease Controlled	Late blight (Phytophthora infestans)
Use rate (product/ha)	0.4 to 0.6 L/ha
Application Timing/Instructions	Begin applications prior to disease development and continue on a 7 to 14 day interval.
	Use higher rate and shorter interval when disease pressure is high.
Minimum recommended application water volume	45 L/ha for aerial application 100 L/ha for ground application
Maximum number of consecutive sprays	2 applications, then switch to a non-Group 49 and 40 fungicide.
Maximum number of applications per crop	4
Maximum rate of active ingredients applied	600 gai/ha of mandipropamid 72 gai/ha of oxathiapiprolin
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.
Pre harvest interval (PHI)	14 days
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# **Specific Use Restrictions:**

- 1. Do not follow soil applications of oxathiapiprolin-containing fungicides with foliar applications of ORONDIS Ultra Fungicide. Use either soil applications or foliar applications, but not both for the control of relevant diseases.
- 2. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer. Where the total number of fungicide applications is less than three (3), apply no more than one (1) application of an ORONDIS Ultra Fungicide.

11.3 Use Directions – Bulb Vegetables

	Bais regetables
Crops	Bulb vegetables
	Chive, fresh leaves (Allium schoenoprasum L.); chive, Chinese,
	fresh leaves (Allium tuberosum); garlic, bulb (Allium sativum L. var.
	sativum); garlic, great-headed, bulb (Allium ampeloprasum L. var.
	ampeloprasum); garlic, serpent, bulb (Allium sativum var.
	ophioscorodon); kurrat (Allium kurrat Schweinf. ex. K. Krause);
	lady's leek (Allium cernuum Roth); leek (Allium ampeloprasum, A.
	porrum, A. tricoccum); leek, wild (Allium tricoccum Aiton); onion,
	Beltsville bunching ( <i>Allium x proliferum</i> (Moench) Schrad.); onion,
	bulb (Allium cepa L. var. cepa); onion, Chinese, bulb (Allium
	chinense G. Don); onion, fresh (Allium fistulosum L. var.
	caespitosum Makino); onion, green (Allium cepa L. var. cepa);
	onion, macrostem (Allium macrostemon Bunge); onion, pearl (Allium
	porrum var. sectivum); onion, potato, bulb (Allium cepa L. var.
	aggregatum G. Don); onion, tree, tops (Allium x proliferum (Moench)
	Schrad. ex Willd.); onion, Welsh, tops ( <i>Allium fistulosum</i> L.); shallot,
	bulb and fresh leaves ( <i>Allium cepa</i> var. <i>aggregatum</i> ); cultivars,
	varieties, and/or hybrids of these.
Disease Controlled	Downy mildew (Peronospora destructor)
Use rate (product/ha)	0.4 L/ha
Application Timing/Instructions	Begin applications prior to disease development and continue on a 7
Application mining/instructions	to 10 day interval.
	to 10 day interval.
	Use shorter interval when disease pressure is high.
	Ose shorter interval when disease pressure is high.
	The use of a penetrating surfactant is recommended.
Minimum recommended	100 L/ha for ground application
application water volume	Too Ena for ground application
Maximum number of	<b>2 applications</b> , then switch to a non-Group 49 and 40 fungicide.
consecutive sprays	= applications, then emitted a non-croap to and to language.
Maximum number of	4.
applications per crop	
Maximum rate of active	400 gai/ha of mandipropamid
ingredients applied	48 gai/ha of oxathiapiprolin
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the
Nostricted-Entry litter var (NEI)	restricted-entry interval of 12 hours.
Pro harvest interval (PUI)	
Pre harvest interval (PHI)	7 days

# **Specific Use Restrictions:**

1. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer. Where the total number of fungicide applications is less than three (3), apply no more than one (1) application of an ORONDIS Ultra Fungicide.

11.4 Use Directions - Leafy Greens - Crop Group 4-13A

11.4 Use Direct	cions – Leafy Greens – Crop Group 4-13A
Crops	Leafy greens (Crop Group 4-13A)
	Amaranth, Chinese (Amaranthus tricolor), Amaranth, leafy (Amaranthus
	spp.), Aster, Indian (Kalimeris indica), Blackjack (Bidens pilosa), Cat's
	Whiskers (Cleome gynandra), Cham-chwi (Doellingeria scabra), Cham-na-
	mul (Pimpinella calycina), Chervil, fresh leaves (Anthriscus cerefolium),
	Chipilin (Crotalaria longirostrata), Chrysanthemum, garland (Glebionis
	coronaria), Cilantro, fresh leaves (Coriandrum sativum), Corn salad
	(Valerianella spp.; including Lamb's lettuce, Valerianella locusta and Italian
	Corn salad, Valerianella eriocarpa), Cosmos (Cosmos caudatus),
	Dandelion ( <i>Taraxacum officinale</i> ), Dang-gwi ( <i>Angelica gigas</i> ), Dillweed,
	fresh leaves (Anethum graveolens), Dock (Rumex patientia), Dol-nam-mul
	(Sedum sarmentosum), Ebolo (Crassocephalum crepidioides), Endive
	(Cichorium endivia ssp. endivia), Escarole (Cichorium endivia ssp. endivia),
	Fameflower ( <i>Talinum fruticosum</i> ), Feather cockscomb ( <i>Glinus</i>
	oppositifolius), Good King Henry (Chenopodium bonus-henricus),
	Huauzontle (Chenopodium berlandieri), Jute leaves (Corchorus spp.),
	Lettuce, bitter ( <i>Launaea cornuta</i> ), Lettuce, head ( <i>Lactuca sativa</i> ; including
	Lactuca sativa var. capitata), Lettuce, leaf (Romaine) (Lactuca sativa;
	including Lactuca sativa var. longifolia; Lactuca sativa var. crispa), Orach
	(Atriplex hortensis), Parsley, fresh leaves (Petroselinum crispum;
	Petroselinum crispum var. neapolitanum), Plantain, buckhorn (Plantago
	spp.; including Buckhorn plantain, <i>Plantago lanceolata</i> and Common
	plantain, <i>P. major</i> ), Primrose, English ( <i>Primula vulgaris</i> ) Purslane, garden
	( <i>Portulaca oleracea</i> ), Purslane, winter ( <i>Claytonia perfoliata</i> ), Radicchio
	(Red Chicory) ( <i>Cichorium intybus</i> ), Spinach ( <i>Spinacia oleracea</i> ), Spinach,
	Malabar ( <i>Basella alba</i> ), Spinach, New Zealand ( <i>Tetragonia tetragonioides</i> ),
	Spinach, tree (Giant Lambsquarter) (Chenopodium giganteum), Swiss
	chard (Beta vulgaris subsp. vulgaris), Tanier spinach (Xanthosoma
	brasiliense), Violet, Chinese (Asystasia gangetica), Cultivars, varieties, and
	hybrids of these commodities.
Diseases Controlled	Downy mildew (Bremia lactucae and Peronospora spp.)
Use rate (product/ha)	0.6 L/ha
Application	Begin applications prior to disease development and continue on a 7 to 10
Timing/Instructions	day interval.
]	
	Use shorter interval when disease pressure is high.
Minimum recommended	100 L/ha for ground application
application water volume	
Maximum number of	2 applications, then switch to a non-Group 49 and 40 fungicide.
consecutive sprays	
Maximum number of	4
applications per crop	
Maximum amount of	600 gai/ha of mandipropamid
active ingredients per	72 gai/ha of oxathiapiprolin
season	
Restricted-Entry Interval	Do not enter or allow worker entry into treated areas during the restricted-
(REI)	entry interval of 12 hours.
Pre harvest interval (PHI)	1 day
Specific Use Restrictions:	

# **Specific Use Restrictions:**

1. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer. Where the total number of fungicide applications is less than three (3), apply no more than one (1) application of an ORONDIS Ultra Fungicide.

11.5 Use Directions – Brassica Leafy Greens – Crop Group 4-13B

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Crops	Brassica leafy greens (Crop Group 4-13B)
	Arugula ( <i>Eruca sativa</i> ), Broccoli raab ( <i>Brassica ruvo</i> ), Broccoli,
	Chinese ( <i>Brassica oleracea</i> var. <i>alboglabra</i> ), Cabbage, Abyssinian
	(Brassica carinata), Cabbage, seakale (Brassica oleracea L. var.
	costata), Chinese cabbage, bok choy (Brassica rapa subsp.
	chinensis), Collards (Brassica oleracea var. viridis), Cress, garden
	(Lepidium sativum), Cress, upland (Barbarea vulgaris), Hanover
	salad (Brassica napus var. pabularia), Kale (Brassica oleracea var.
	sabellica), Maca (Lepidium meyenii), Mizuna (Brassica rapa L. subsp.
	nipposinica), Mustard greens (Brassica juncea subspp.; including
	Brassica juncea subsp. Integrifolia and Brassica juncea subsp.
	tsatsai), Radish, leaves (Raphanus sativus L. var sativus; including
	Raphanus sativus var. mougri, Raphanus sativus L. var. oleiformis),
	Rape greens ( <i>Brassica napus</i> var. <i>napus</i> including <i>Brassica rapa</i>
	subsp. trilocularis; Brassica rapa subsp. dichotoma, Brassica rapa
	subsp. oleifera), Rocket, wild (Diplotaxis tenuifolia), Shepherd's purse
	(Capsella bursa-pastoris), Turnip greens (Brassica rapa L. subsp.
	rapa), Watercress (Nasturtium officinale), Cultivars, varieties, and
	hybrids of these commodities.
Disease Controlled	Downy mildew (Peronospora parasitica)
Use rate (product/ha)	0.6 L/ha
Application	Begin applications prior to disease development and continue on a 7
Timing/Instructions	to 10 day interval.
,g,e det.ee	to to day intervali
	Use shorter interval when disease pressure is high.
	oce diletter interval when allocade procedure to high.
	The use of a non-ionic (NIS) surfactant is recommended.
Minimum recommended	100 L/ha for ground application
application water volume	
Maximum number of	<b>2 applications</b> , then switch to a non-Group 49 and 40 fungicide.
consecutive sprays	
Maximum number of	4
applications per crop	
Maximum amount of active	600 gai/ha of mandipropamid
ingredients per season	72 gai/ha of oxathiapiprolin
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the
1	restricted-entry interval of 12 hours.
Pre harvest interval (PHI)	1 day
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# **Specific Use Restrictions:**

1. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer. Where the total number of fungicide applications is less than three (3), apply no more than one (1) application of an ORONDIS Ultra Fungicide.

11.6 Use Directions – Brassica Head and Stem Vegetables – Crop Group 5-13

Crops	Brassica head and stem vegetables (Crop Group 5-13)
	Broccoli (Brassica oleracea var. italica), Brussels sprouts (Brassica
	oleracea var. gemmifera), Cabbage (Brassica oleracea var.
	capitata), Cabbage, Chinese, napa (Brassica rapa subsp.
	pekinensis), Cauliflower (Brassica oleracea var. capitata)
	Cultivars, hybrids, and varieties of these commodities.
Disease Controlled	Downy mildew (Peronospora parasitica)
Use rate (product/ha)	0.6 L/ha
Application Timing/Instructions	Begin applications prior to disease development and continue on a 7 to 10 day interval.
	Use shorter interval when disease pressure is high.
	The use of a non-ionic (NIS) surfactant is recommended.
Minimum recommended	100 L/ha for ground application
application water volume	
Maximum number of consecutive sprays	2 applications, then switch to a non-Group 49 and 40 fungicide.
Maximum number of	4
applications per crop	
Maximum amount of active	600 gai/ha of mandipropamid
ingredients per season	72 gai/ha of oxathiapiprolin
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the
·	restricted-entry interval of 12 hours.
Pre harvest interval (PHI)	1 day
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# **Specific Use Restrictions:**

1. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer. Where the total number of fungicide applications is less than three (3), apply no more than one (1) application of an ORONDIS Ultra Fungicide.

11.7 Use Directions – Fruiting Vegetables

	, I talking regetables	
Crops	Fruiting vegetables  African eggplant (Solanum macrocarpon), Cocona (Solanum sessiliflorum), Currant tomato (Solanum pimpinellifolium), Eggplant (Solanum melongena), Garden huckleberry (Solanum scabrum), Goji berry (Lycium barbarum), Ground cherry (Physalis alkekengi, P. grisea, P. peruvian, P. pubescens.), Naranjilla (Solanum quitoense), Okra (Abelmoschus esculentus), Pea eggplant (Solanum torvum), Pepino (Solanum muricatum), Pepper, bell (Capsicum annuum, Capsicum spp.), Pepper, non-bell (Capsicum chinense, C. annuum, C. frutescens, C. baccatum, C. pubescens, Capsicum spp.), Scarlet eggplant (Solanum aethiopicum), Tomatillo (Physalis philadelphica), Tomatil (Solanum betasse)	
Disease Controlled Use rate (product/ha) Application Timing/Instructions	Tomato (Solanum lycopersicon), Tree tomato (Solanum betacea)  Cultivars, varieties and/or hybrids of these  Late blight (Phytophthora infestans)  0.6 L/ha  Begin applications prior to disease development and continue on a 7 to 14 day interval.  Use shorter interval when disease pressure is high.	

Disease Suppressed	Phytophthora blight (Phytophthora capsici) – foliar phase
Use rate (product/ha)	0.6 L/ha
Application Timing/Instructions	Begin applications prior to disease development and continue on a 7 to 14 day interval.  Use shorter interval when disease pressure is high.
Disease Suppressed	Phytophthora root and crown rot (Phytophthora capsici) – soil phase
Use rate (product/ha)	0.6 L/ha
Application Timing/Instructions	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplant plug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.  Please follow the directions under TRANSPLANT APPLICATION to determine the appropriate application rate and method to suppress Phytophthora root and crown rot.
Minimum recommended application water volume	100 L/ha for ground application
Maximum number of consecutive sprays	2 applications, then switch to a non-Group 49 and 40 fungicide.
Maximum number of applications per crop	4
Maximum amount of active ingredients per season	600 gai/ha of mandipropamid 72 gai/ha of oxathiapiprolin
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.
Pre harvest interval (PHI)	1 day
Specific Use Restrictions:	

- 1. Use either soil applications or foliar applications, but not both, for disease control.
- 2. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer. Where the total number of fungicide applications is less than three (3), apply no more than one (1) application of an ORONDIS Ultra Fungicide.

11.8 Use Directions – Cucurbit Vegetables – Crop Group 9

Crops	Cucurbit vegetables (Crop Group 9)		
	Chayote (fruit) (Sechium edule), Chinese waxgourd (Chinese		
	preserving melon) (Benincasa hispida), Citron melon (Citrullus		
	lanatus var. citroides), Cucumber (field) (Cucumis sativus), Gerkin		
	(Cucumis anguria), Gourd, edible (Lagenaria spp.) (includes hyotan,		
	cucuzza), Gourd, edible (Luffa acutangula, L. cylindrica) (includes		
	hechima, Chinese okra), Momordica spp. (includes balsam apple,		
	balsam pear, bitter melon, Chinese cucumber), Muskmelons		
	(hybrids and/or cultivars of Cucumis melo) (includes true cantaloupe,		
	cantaloupe, casaba, crenshaw melon, golden pershaw melon,		
	honeydew melon, honey balls, mango melon, Persian melon,		
	pineapple melon, Santa Claus melon and snake melon), Pumpkin		
	(Cucurbita spp.), Squash, Summer (Cucurbita pepo var. melopepo)		
	(includes crookneck squash, scallop squash, straightneck squash,		
	vegetable marrow, zucchini), Squash, winter (Cucurbita maxima, C.		
	moschata) (includes butternut squash, calabaza, hubbard squash);		
	(C. mixta, C. pepo) (includes acorn squash, spaghetti squash),		
	Watermelon (includes hybrids and/or varieties of Citrullus lanatus)		
Diseases Suppressed	Phytophthora root and crown rot (Phytophthora capsici) - soil		
	phase		
Use rate (product/ha)	0.6 L/ha		
Application Timing/Instructions	O.6 L/ha  For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that		
	For suppression of the soil phase of Phytophthora root and crown		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.		
	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.  Please follow the directions under TRANSPLANT APPLICATION to determine the appropriate application rate and method to suppress		
Application Timing/Instructions	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.  Please follow the directions under TRANSPLANT APPLICATION to determine the appropriate application rate and method to suppress Phytophthora root and crown rot.		
Application Timing/Instructions  Disease Suppressed	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.  Please follow the directions under TRANSPLANT APPLICATION to determine the appropriate application rate and method to suppress Phytophthora root and crown rot.  Phytophthora blight (Phytophthora capsici) – foliar phase		
Application Timing/Instructions  Disease Suppressed Use rate (product/ha)	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.  Please follow the directions under TRANSPLANT APPLICATION to determine the appropriate application rate and method to suppress Phytophthora root and crown rot.  Phytophthora blight (Phytophthora capsici) – foliar phase 0.6 L/ha		
Application Timing/Instructions  Disease Suppressed Use rate (product/ha)	For suppression of the soil phase of Phytophthora root and crown rot, ORONDIS Ultra Fungicide must be applied in a manner that ensures the product solution adequately saturates the root zone of the transplantplug through a transplant water application. When applied to the root/crown zone before, during, or soon after sowing once roots are present or transplanting the crop, ORONDIS Ultra Fungicide will suppress Phytophthora root and crown rot that limits crop stand establishment.  Please follow the directions under TRANSPLANT APPLICATION to determine the appropriate application rate and method to suppress Phytophthora root and crown rot.  Phytophthora blight (Phytophthora capsici) – foliar phase  0.6 L/ha  Begin applications prior to disease development and continue on a 7		

Diagona Controlled	Deursy milder (Decydeneronenero sybeneio)		
Diseases Controlled	Downy mildew (Pseudoperonospora cubensis)		
Use rate (product/ha)	0.4 to 0.6 L/ha		
Application Timing/Instructions	Begin applications prior to disease development and continue on a 7 to 10 day interval.		
	Use the higher rate and shorter interval when disease pressure is high.		
Minimum recommended application water volume	100 L/ha for ground application		
Maximum number of consecutive sprays	1 application, then switch to a non-Group 49 and 40 fungicide.		
Maximum number of applications per crop	4		
Maximum amount of active ingredients per season	600 gai/ha of mandipropamid 72 gai/ha of oxathiapiprolin		
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.		
Pre harvest interval (PHI)	0 day		
Specific Use Postrictions:			

- 1. Use either soil applications or foliar applications, but not both, for disease control.
- 2. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer.

# 11.9 Use Directions – Greenhouse Tomatoes and Cucumbers

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Crops	Greenhouse tomatoes
Disease Controlled	Late blight (Phytophthora infestans)
Disease Suppressed	Phytophthora blight (Phytophthora capsici)
Use rate (product/ha)	0.6 L/ha
Application Timing/Instructions	Begin applications prior to disease development and continue on a 7 to 10 day interval.
	Use the shorter interval when disease pressure is high.
Minimum recommended	100 L/ha
application water volume	
Maximum number of consecutive sprays	2 applications, then switch to a non-Group 49 and 40 fungicide.
Maximum number of applications per crop cycle	2
Maximum amount of active ingredients per season	300 gai/ha of mandipropamid 36 gai/ha of oxathiapiprolin
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.
Pre harvest interval (PHI)	1 day
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#### **Specific Use Restrictions:**

- 1. Not to be used on plants destined for the field (transplants).
- 2. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer. Where the total number of fungicide applications is less than three (3), apply no more than one (1) application of an ORONDIS Ultra Fungicide.

Crops	Greenhouse cucumbers		
Disease Controlled	Downy mildew (Pseudoperonospora cubensis)		
Use rate (product/ha)	0.4 to 0.6 L/ha		
Application Timing/Instructions	Begin applications prior to disease development.		
	Use the higher rate when disease pressure is high.		
Disease Suppressed	Phytophthora blight (Phytophthora capsici)		
Use rate (product/ha)	0.6 L/ha		
Application Timing/Instructions	Begin application prior to disease development.		
Minimum recommended	100 L/ha		
application water volume			
Maximum number of	1 application, then switch to a non-Group 49 and 40 fungicide.		
consecutive sprays			
Maximum number of	1		
applications per crop			
Maximum amount of active	150 gai/ha of mandipropamid		
ingredients per crop cycle	18 gai/ha of oxathiapiprolin		
Restricted-Entry Interval (REI)	Do not enter or allow worker entry into treated areas during the		
	restricted-entry interval of 12 hours.		
Pre harvest interval (PHI)	1 day		
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- 1. Not to be used on plants destined for the field (transplants).
- **2.** DO NOT apply by chemigation.
- 3. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer.

#### 12.0 MINOR USES

# READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS

# **NOTE TO USER:**

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Syngenta Canada Inc. under the User Requested Minor Use Label Expansion program. For these uses, Syngenta Canada Inc. 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.

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Crops	Basil, field and greenhouse (Ocimum basilicum)		
Disease Controlled	Downy Mildew (Peronospora belbahrii)		
Use rate (product/ha)	0.6 L/ha		
Application Timing/Instructions	Begin foliar applications prior to disease development, and continue on a 5 to 10 day interval.		
	Apply in a minimum of 100L of water, increasing spray volume as needed to ensure complete canopy coverage.		
Minimum recommended application water volume	100 L/ha for ground application		
Maximum number of consecutive sprays	1 application then switch to a non-Group 49 and 40 fungicide.		
Maximum number of applications per crop	4		
Maximum rate of active ingredients applied	600 gai/ha of mandipropamid 72 gai/ha of oxathiapiprolin		
Re-entry Interval (REI)	12 hours after application		
Pre harvest interval (PHI)	1 day		

- 1. When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer.
- 2. Not to be used on plants in the greenhouse destined for the field (transplants).

# 12.2 Use Directions - Hops

Crop	Hops		
Disease Controlled	Downy Mildew (Pseudoperonospora humuli)		
Use Rate (product/ha)	0.6 L/ha		
Application Timing/Instructions	Foliar – Airblast or Boom		
	Begin applications prior to disease development and continue on a 7 to day 10 interval.		
Minimum recommended application water volume	100 L/ha (boom) 200 L/ha (airblast)		
Maximum number of consecutive sprays	2 applications, then switch to a non-Group 49 and 40 fungicide.		
Maximum number of applications per crop	3		
Maximum amount of active	450 g ai/ha of mandipropamid		
ingredients per crop cycle	54 g ai/ha of oxathiapiprolin		
Re-entry Interval (REI)	12 hours after application		
Pre-harvest interval (PHI)	7 days		
On a different Descriptions			

# **Specific Use Restrictions:**

 Do not use ORONDIS ULTRA Fungicide for more than 33% of the total fungicide applications.

<u>Airblast application</u>: **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.

# 13.0 RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, ORONDIS Ultra Fungicide contains a Group 49 and a Group 40 fungicide. Group 49 (oxathiapiprolin) inhibits the oxysterol-binding protein (OSBP). Any fungal population may contain individuals naturally resistant to ORONDIS Ultra Fungicide and other Group 49 and Group 40 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 ORONDIS Ultra Fungicide or other Group 49 or 40 fungicides with different groups that control the same pathogens.

Follow directions regarding the maximum number of successive applications for each use outlined in the Use Directions Tables.

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

When 3 or more fungicide applications are made, use ORONDIS Ultra Fungicide (or other oxathiapiprolin containing products) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer.

# DO NOT apply at rates lower than recommended on the label.

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 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 sign of resistance development. Notify Syngenta Canada Inc. if reduced sensitivity of the pathogen to ORONDIS Ultra 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, to which pathogen resistance has not developed, 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 or to report suspected resistance, Contact Company representatives at 1-87-SYNGENTA (1-877-964-3682) or at <a href="https://www.syngenta.ca">www.syngenta.ca</a>.

13.1 Application Limitations and Pre-harvest Intervals

Crop*	Maximum Product Rate/ha/application (L/ha)	Maximum total (L/ha/ Season)	Pre-Harvest Interval (PHI) (days)	Minimum Re- treatment Interval (days)
Potato	0.6	2.4	14	7
Bulb vegetables	0.4	1.6	7	7
Leafy greens (CG 4-13A)	0.6	2.4	1	7
Brassica leafy greens (CG 4-13B)	0.6	2.4	1	7
Brassica head and stem (CG 5-13)	0.6	2.4	1	7
Fruiting vegetables	0.6	2.4	1	7
Basil, field and greenhouse	0.6	2.4	1	5
Cucurbits (CG 9)	0.6	2.4	0	7
Greenhouse tomatoes	0.6	1.2	1	7
Greenhouse cucumbers	0.6	0.6	1	NA
Hops	0.6	1.8	7	7

<sup>\*</sup>For specific crops in a group and use directions, refer to the Specific Directions For Use

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