U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
100-1572	9/10/15

Term of Issuance:
Unconditional

Name of Pesticide Product:
Orondis OD

Name and Address of Registrant (include ZIP Code):

Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:	**Date:**
Shaunta Hill for- Tony Kish, Product Manager 22 Fungicide Branch, Registration Division (7505P)	9/10/15

EPA Form 8570-6

2. Make the following label changes before you release the product for shipment:

    - Revise the EPA Registration Number to read, "EPA Reg. No. 100-1572."

3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 08/21/2015

If you have any questions, please contact Marcel Howard by phone at (703)305-6784, or via email at howard.marcel@epa.gov.

Enclosure: Stamped "Accepted" Product Label

[Master Label]

GROUP U15 FUNGICIDE

Orondis™ OD

[Alternate Brand Names: Orondis™ Opti A, Orondis™ Ultra A]

Fungicide

Active Ingredient:	
Oxathiapiprolin*:	10.2%
Other Ingredients:	89.8%
Total:	100.0%

* CAS No. 1003318-67-9

Orondis™ OD is formulated as an oil dispersion and contains 0.83 pounds of oxathiapiprolin per gallon of product.

KEEP OUT OF REACH OF CHILDREN.
CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-XXX

EPA Est. No.

SCP

Net Contents

ACCEPTED

Sep 10, 2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1572

TABLE OF CONTENTS

1.0 FIRST AID

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call **1-800-888-8372**	

2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards to Human and Domestic Animals

CAUTION/PRECAUCIÓN

Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear chemical-resistant gloves made of barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or Viton® ≥14 mils. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

2.2 Personal Protective Equipment (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves made of barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, or Viton ≥ 14 mils.

2.2.1 USER SAFETY REQUIREMENTS

Follow the 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.

2.2.2 ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural

pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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.

2.3 Environmental Hazards

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Orondis OD must be used only in accordance with instructions on this label, in separately issued labeling or exemptions under FIFRA (Supplemental Labels, Special Local Need Registration, FIFRA Section 18 exemptions), or as otherwise permitted by FIFRA. Always read the entire label, including the Conditions of Sale and Limitation of Warranty and Liability.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label about personal protective equipment (PPE), and restricted-entry interval, and notification to workers (as applicable). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes and socks
- Chemical-resistant gloves (made of any waterproof material)

3.0 PRODUCT INFORMATION

Read all label directions before use. All applications must be made according to the use directions that follow.

- Orondis OD is an oil dispersion containing oxathiapiprolin and is recommended for use by foliar or soil application for the control or suppression of the diseases listed on this label.
- Orondis OD is active against selective Oomycete diseases listed on this label.
- Orondis OD is a systemic fungicide and moves systemically in the plant xylem. Uptake into the leaf tissue allows good translaminar movement and protection of new plant growth.
- Orondis OD must be applied in a regularly scheduled protective spray program in rotation with other fungicides.
- See **Section 7.0** for specific crop/disease recommendations.

3.0.1 RAINFASTNESS

Orondis OD rapidly penetrates into plant tissues and is rainfast within 30 minutes after spray residues have dried.

3.0.2 MODE OF ACTION

Oxathiapiprolin, the active ingredient in Orondis OD, acts as an oxysterol-binding protein modulator in fungal cells.

3.0.3 CROP TOLERANCE

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 OD 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.

3.1 Integrated Pest Management (IPM)

Syngenta recommends the use of Integrated Pest Management (IPM) programs to control pests. Orondis OD 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 state cooperative 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.

3.2 Resistance Management

GROUP U15 FUNGICIDE

Orondis OD contains the active ingredient oxathiapiprolin, which has been assigned Group U15 by the Fungicide Resistance Action Committee (FRAC). Oxathiapiprolin modulates an oxysterol-binding protein (OSBP) in fungal cells. Repeated use of products for control of specific plant pathogens may lead to selection of resistant strains of fungi and result in a reduction of disease control. A disease management program for Orondis OD that includes rotation and tank mixing with fungicides with a different mode of action is essential to reduce the risk of fungicide resistance development.

As part of a resistance management strategy:

- Do not tank-mix Orondis OD with any fungicide for which resistance to the target disease has developed.
- Make no more than 2 sequential applications of Orondis OD before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Orondis OD or Orondis with foliar applications of

Orondis OD.

- Different application methods (foliar and soil) must not be combined when protecting a crop during a growing season.
- Do not use Orondis OD for more than 33% of the total fungicide applications per season per crop.
- For guidance on a particular crop and disease control situation, consult your state extension specialist for official state recommendations.
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4.0 APPLICATION DIRECTIONS

4.1 Methods of Application

4.1.1 FOLIAR APPLICATION (INCLUDING AERIAL APPLICATION)

See **Section 7.0** for specific foliar application instructions. Orondis OD may be used with adjuvants, for example, nonionic surfactants, crop oils, methylated seed oils, and blends at typical agricultural use rates for these adjuvants.

4.1.2 SOIL APPLICATION

- For suppression or control of soil borne diseases, as recommended in this label, Orondis OD must be applied in a manner that ensures the product solution adequately saturates the target crop root/crown zone.
- When applied to the root/crown zone before, during, or soon after sowing or transplanting the crop, Orondis OD will suppress or control certain seedling root rot and crown diseases that limit crop stand establishment.
- For soil application, apply Orondis OD using drip irrigation, transplant water application (water wheel or continuous stream transplanters), surface band or directed application, or in-furrow application using the rates in the table below. See table and **Section 4.1.3** for drip irrigation instructions.
- 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 application rates for Orondis OD /1,000 feet of row, based on plant row spacing.

Orondis OD Conversion Chart for Drip (Trickle) Chemigation, Continuous Transplant Water, and Direct/Banded/In-Furrow Application							
Corresponding field rate (fl oz/acre)	**Rate in fl oz product/1,000 row ft; based on planted row spacing (in inches) of:**						
	30	34	36	48	60	72	84
4.8	0.28	0.31	0.33	0.44	0.55	0.66	0.77
9.6	0.55	0.62	0.66	0.88	1.10	1.32	1.54
19.2	1.10	1.25	1.32	1.76	2.20	2.65	3.09
38.6	2.22	2.51	2.66	3.55	4.43	5.32	6.20

Transplant Water Application

- Transplants should be adequately watered before transplanting. Ensure transplant water volume is sufficient to thoroughly wet the root zone.
- See table for continuous-stream transplanters. Ensure 4-8 fl oz transplant water/ transplant depending on sandy (4 fl oz) vs silty soil (6-8 fl oz).
- For water-wheel transplanters, use the plant population to determine the rate per plant.

  Example:

$$\frac{\text{38.6 fl oz product}}{\text{acre}} \times \frac{\text{acre}}{\text{4356 squash plants}} = \frac{\text{0.00886 fl oz product}}{\text{squash plant}}$$

Surface Band or Directed Application

- Apply in a 4- to 12-inch band. See table for rates.
- Follow application with cultivation or irrigation (1/2 - 1 inch) to move Orondis OD to the target disease zone.

Transplant Tray Application

- Apply as a foliar spray to the transplants in the transplant tray 24-48 hours prior to transplanting. Immediately water the spray off the foliage into the transplant tray soil, not watering past soil saturation.
- For this application, the acre of transplants receives the full recommended acre rate for transplant tray application, applied as a foliar spray, which is then washed into the transplant cubes. Transplant cubes should be on the dry side at the beginning of this treatment.

4.1.3 DRIP (TRICKLE) IRRIGATION INSTRUCTIONS

Refer to **Section 4.5** for important additional information regarding Chemigation.

- Orondis OD must be applied in a manner that ensures the product is in the root zone.
- Orondis OD must be in the root zone to provide effective control of target pests.
- Orondis OD is most effective when it is applied so that the roots are at or near the site of application; manage irrigation so that significant quantities of Orondis OD remain in the root zone.
- Do not begin applications until after crop emergence in direct-seeded crops.
- Do not make applications if soil moisture is below the level required for active plant growth.
- This product must be applied uniformly in the root zone or poor performance may result. Drip tape or emitters must be located within or directly adjacent to the root zone.
- Orondis OD must not be applied at the same time that a drip irrigation line clean out product is being used as performance may be reduced.
- The drip system must be properly designed, free of leaks, and operated in a manner

that provides uniform application of water throughout the field.

- In most situations, this product should be applied during the first 1/3 of the irrigation cycle, starting just after the system has come up to pressure.
- The minimum injection period is the time that it takes water to move from the injection point to the furthest emitter in the irrigation zone (propagation time). If this time is not known, it can be calculated by measuring the time for a soluble dye to move from the injection point to the farthest emitter. A longer injection improves uniformity throughout the zone, but needs to allow for at least an equal period of water to flush the system and move the product through the soil.

4.2 Application Equipment

Orondis OD can be applied with commonly used ground equipment, hose-end, pressurized, greenhouse and hand-held sprayers, air or chemigation equipment, except as otherwise directed, using sufficient water to obtain thorough coverage of plants. Maintain agitation during mixing and application to assure uniform product suspension.

4.2.1 SHIELDED SPRAYERS

- Shielding the boom or individual nozzles can reduce the effects of wind.
- However, it is the responsibility of the applicator to verify that the shields are minimizing drift potential, and not interfering with uniform deposition of the product.

4.2.2 AIR-ASSISTED (AIR-BLAST) FIELD CROP SPRAYERS

- Air-assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result.
- It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, that it is configured properly, and that drift potential has been minimized.
- **Note:** Air-assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Read the specific crop use and application equipment instructions to determine if an air-assisted field crop sprayer can be used.

4.2.3 SPRAY TANK CLEAN-OUT

- Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.
- Drain application equipment. Thoroughly rinse and flush all application equipment with clean water.
- Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

4.3 Application Volume and Spray Coverage

See **Sections 4.1 and 7.0** for application volume information.

4.4 Mixing Directions

4.4.1 ORONDIS OD ALONE

1. Fill clean spray tank 1/2 - 2/3 full of water.
2. While agitating, add the required amount of Orondis OD, continuing agitation until the product is completely dispersed.
3. Continue filling the tank, with agitation. Spray immediately after preparation, continuing agitation during spraying.

4.4.2 TANK-MIX PRECAUTIONS

- The crop safety of all tank mixtures with Orondis OD which may include physically compatible pesticides, fertilizers, adjuvants, and/or additives, has not been tested.
- When using a tank mixture with Orondis OD, it is important to understand crop safety.
- To test for crop safety prepare a small volume of the intended tank mixture, apply it to an area of the target crop as directed by both this label and the tank-mix partner product labels, and observe the treated crop to ensure that a phytotoxic response does not occur.
- Some materials including oils, surfactants, adjuvants, and pesticide formulations when applied individually, sequentially, or in tank mixtures may solubilize the plant cuticle, facilitate penetration into plant tissue, and increase potential for crop injury.

4.4.3 TANK-MIX COMPATIBILITY TEST

Orondis OD is physically compatible with many commonly used fungicides, herbicides, insecticides, biological control products, liquid fertilizers, non-ionic surfactants, crop oils, methylated seed oils and drift control additives. However, since the formulations of products change, it is important to test the physical compatibility of desired tank mixes and check for undesirable physical effects, including settling out or flocculation.

A jar compatibility test is recommended prior to tank mixing with other pesticides and/or adjuvants/additives, in order to ensure the compatibility of Orondis OD with other tank-mixed pesticide, adjuvant or fertilizer partners. The recommended procedure for conducting jar tank-mix compatibility tests is as follows:

Compatibility Test: Since pesticides, adjuvants and fertilizers can vary in quality, always **check tank-mix compatibility with tank-mixed partners each time before use**. Be especially careful when using **complete** suspension or fluid fertilizers as carriers, as serious compatibility problems are more likely to occur with these products. Commercial application equipment may improve tank-mix compatibility in some instances. The following test assumes a spray volume of 25 gallons/A. For other spray

volumes, make appropriate changes in the components. Check tank-mix compatibility using this procedure:

1. Add 1 pt of carrier (either the water or liquid fertilizer to be used in the spray operation) to each of two clear 1-qt jars with tight lids.
2. To **one** of the jars, add ¼ teaspoon or 1.2 ml of a commercially available tank-mix compatibility agent approved for this use (¼ teaspoon is equivalent to 2 pt/100 gallons of spray). Invert the jar, shake or stir gently to ensure thorough mixing.
3. To **both** jars, add the appropriate amount of each tank-mix partner. If more than one tank-mix partner is to be used, add them separately with dry formulations (wettable powders or water dispersible granules) first, followed by liquid flowables, capsule suspensions, emulsifiable concentrates and finally adjuvants. After each addition, invert the jar, shake or stir gently to thoroughly mix. The appropriate amount of each tank-mix partner for this test, is as follows:

   Dry formulations: For each pound to be applied per acre, add 1.5 level teaspoons to each jar.

   Liquid formulations: For each pint to be applied per acre, add 1/2 teaspoon or 2.5 milliliters to each jar.
4. After adding all ingredients, put lids on and tighten, then invert each jar 10 times to fully mix. Let the mixtures stand for 15-30 minutes and then assess by looking for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if a compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry dry formulations in water before addition, or (B) add the compatibility agent directly into liquid formulations, before addition to the tank-mixture. If these procedures are followed but incompatibility is still observed, do not use the tank-mixture.

4.4.4 ORONDIS OD IN TANK MIXTURES

- Always follow the tank mix instructions of the product label that is most restrictive.
- Apply at least the minimum labeled rate of each fungicide in the tank mix.
- Consult a Syngenta representative or local agricultural authorities for more information concerning tank mixtures.
- When using in a tank-mix, add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.
  1. Water-soluble bag (WSB)
  2. Water-soluble granules (SG)
  3. Water-dispersible granules (WG)
  4. Wettable powders (WP)
  5. Water-based suspension concentrates (SC)
  6. Capsule suspension (CS)
  7. Suspo-emulsion (SE)
  8. Oil dispersion (OD) (Orondis OD)

9. Emulsion in water (EW)
10. Emulsifiable concentrates (EC)
11. Water-soluble concentrates (SL)
12. Adjuvants, surfactants, oils
13. Soluble fertilizers
14. Drift retardants

4.5 Application through Irrigation Systems (Chemigation)

- Apply Orondis OD only through drip (trickle) or strip tubing irrigation systems and sprinkler irrigation systems (such as center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems).
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- Do not connect any irrigation system (including greenhouse systems) used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices for public water systems below are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.
- See **Required System Safety Devices for All Chemigation and Public Water Systems** (**Section 4.5.1**).
- **Preparation:** A pesticide tank is recommended for the application of Orondis OD in drip chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. With the mix tank 1/4 to 1/2 full with water and the agitator running, measure the required amount of Orondis OD and add it to the tank. Then add additional water to bring your total pesticide mixture up to the desired volume for your application. **Note:** Always add the Orondis OD to water; never put Orondis OD into a dry tank or other mixing equipment without first adding water. See **Section 4.4.2** for tank-mixing sequence. Continue to agitate the mixture throughout the application process. Use mechanical or hydraulic agitation; do not use air agitation.
- **Injection into Chemigation Systems:** Inject the proper amount of Orondis OD into the irrigation water flow using a positive displacement injection pump or a Venturi injector. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water.
- **Uniform Water Distribution:** The irrigation system used for application of Orondis OD must provide for uniform distribution of Orondis OD-treated water. Non-uniform distribution can result in crop injury, lack or effectiveness, or illegal pesticide residues in or on the crop being treated. Ensure the drip chemigation system is operating properly to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.
- **Monitoring of Chemigation Applications:** A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a

responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for applicators and other handlers when making adjustments or repairs on the chemigation system when Orondis OD is in the irrigation water.

- **Operation:** Start the water pump and let the system achieve the desired pressure before starting the injector. Start the injector. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system.
- **Cleaning the System:** Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

Required System Safety Devices and Instructions for Public Water Systems

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be 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 the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
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 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, or, in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering device, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. 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.
8. Good agitation is required in the injection tank.

9. In moving systems, apply specified dosage of Orondis OD fungicide as a continuous injection. In non-moving systems, inject Orondis OD for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
10. Mix the amount of Orondis OD needed for acreage to be treated into the quantity of water determined during prior calibration. For moving systems, inject into the system continuously for one complete revolution of the field. For non-moving systems, inject into system for the time established during calibration.
11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all Orondis OD is flushed from system.

5.0 ROTATIONAL CROP RESTRICTIONS

The following crops may be planted at the specified interval following application of Orondis OD.

Crop, Crop Group, or Subgroup	Plant-back Restriction (in Days) following Last Application of Orondis OD
Tuberous and Corm Vegetables (Subgroup 1C)	0
Bulb Vegetables (Group 3-07)	0
Leafy Greens (Subgroup 4A)	0
Brassica, Head and Stem (Subgroup 5A)	0
Peas, Succulent Shelled	0
Peas, Edible-Podded	0
Fruiting Vegetables (Group 8-10)	0
Cucurbit Vegetables (Group 9)	0
Strawberries	0
Herbs and Spices (Group 19)	0
Oilseed (Group 20)	0
Ginseng	0
Tobacco	0
Cereals (Group 15,16)	30
Grass animal feeds (Group 17)	30
Legume Vegetables, except succulent shelled and edible-podded peas	180
Non-grass Animal feed (Group 18)	180
Peanuts	180
All other crops not listed	180

6.0 RESTRICTIONS AND PRECAUTIONS

See **Section 7.0** for crop-specific restrictions and precautions.

6.1 Use Restrictions

- Different application methods (foliar and soil) must not be combined when protecting a crop during a growing season.
- Use this product only in commercial and farm plantings.
- Do not use for home plantings.
- May be used in greenhouse production of tomatoes, bell and non-bell peppers, and edible peel cucurbits (cucumbers, summer squash). Do not use in greenhouses on any other crops.
- Orondis OD must be used only in accordance with this label.
- Do not formulate this product into other end-use products.

6.2 Spray Drift Precautions

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

6.2.1 IMPORTANCE OF DROPLET SIZE

- The most effective drift management strategy is to apply the largest droplets which are consistent with pest control objectives.
- The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage.
- Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions.
- A droplet size classification system describes the range of droplet sizes produced by spray nozzles. The American Society of Agricultural and Biological Engineers (ASABE) provides a Standard that describes droplet size spectrum categories defined by a number of reference nozzles (fine, coarse, etc.). Droplet spectra resulting from the use of a specific nozzle may also be described in terms of volume mean diameter (VMD). Coarser droplet size spectra have larger VMD's and lower drift potential.

6.2.2 AERIAL APPLICATION SPRAY DRIFT MANAGEMENT

- **Nozzle Type –** Solid-stream or other low-drift nozzles produce the coarsest droplet spectra.
- **Number of Nozzles –** Using the minimum number of nozzles with the highest flow rate that provide uniform coverage will produce a coarser droplet spectra.
- **Nozzle Orientation –** Orienting nozzles in a manner that minimizes the effects of air shear will produce the coarsest droplet spectra. For some nozzles such as solid stream, pointing the nozzles straight back parallel to the airstream will produce a

coarser droplet spectra than other orientations.

- **Pressure –** Selecting the pressure that produces the coarsest droplet spectrum for a particular nozzle and airspeed reduces spray drift potential. For some nozzle types such as solid streams, lower pressures can produce finer droplet spectra and increase drift potential.
- **Boom Length –** Using shorter booms decreases drift potential. Boom lengths are expressed as a percentage of an aircraft's wingspan or a helicopter's rotor blade diameter. Shorter boom length and proper positioning can minimize drift caused by wingtip or rotor vortices.
- **Application Height –** Applications made at the lowest height that are consistent with pest control objectives and the safe operation of the aircraft will reduce the potential for spray drift.

6.2.3 GROUND APPLICATION SPRAY DRIFT MANAGEMENT

- **Nozzle Type –** Select a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. The use of low-drift nozzles will reduce drift potential.
- **Pressure –** The lowest spray pressures recommended for the nozzle produce the largest droplets. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, using a higher-capacity nozzle instead of increasing pressure results in the coarsest droplet spectra.
- **Flow Rate/Orifice Size –** Using the highest flow rate nozzles (largest orifice) that are consistent with pest control objectives reduces the potential for spray drift. Nozzles with higher rated flows produce coarser droplet spectra.
- **Application Height –** Applications made at the lowest height consistent with pest control objectives, and that allow the applicator to keep the boom level with the application site and minimize bounce, will reduce the exposure of spray droplets to evaporation and wind, and reduce spray drift potential.

6.2.4 WIND

- Drift potential is lowest when applications are made in light to gentle sustained winds (2-10 mph), which are blowing in a constant direction.
- Many factors, including droplet size and equipment type also determine drift potential at any given wind speed.
- AVOID GUSTY OR WINDLESS CONDITIONS.
- Local terrain can also influence wind patterns.
- Every applicator is expected to be familiar with local wind patterns and how they affect spray drift.

6.2.5 TEMPERATURE AND HUMIDITY

- Setting up equipment to produce larger droplets to compensate for droplet evaporation can reduce spray drift potential.
- Droplet evaporation is most severe when conditions are both hot and dry.

6.2.6 SURFACE TEMPERATURE INVERSIONS

- Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which may cause small suspended droplets to remain close to the ground and move laterally in a concentrated cloud.
- Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning.
- Mist or fog may indicate the presence of an inversion in humid areas. Inversions may also be identified by producing smoke and observing its behavior. Smoke that remains close to the ground, or moves laterally in a concentrated cloud under low wind conditions indicates a surface inversion. Smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

6.2.7 SENSITIVE AREAS

This pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

6.2.8 DRIFT CONTROL ADDITIVES

- Using product compatible drift control additives can reduce drift potential.
- When a drift control additive is used, read and carefully observe cautionary statements and all other information on the additive's label.
- If using an additive that increases viscosity, ensure that the nozzles and other application equipment will function properly with a viscous spray solution.
- Preferred drift control additives have been certified by the Council of Producers and Distributors of Agrotechnology.

7.0 CROP USE DIRECTIONS

7.1 Brassica, Head and Stem Brassica, Crop Subgroup 5A

Crops (including all cultivars, varieties, and/or hybrids of these)		
Broccoli	Cabbage	Cauliflower
Broccoli, Chinese (gai lon)	Cabbage, Chinese (Napa)	Cavalo broccolo
Brussels sprouts	Cabbage, Chinese mustard (gai choy)	Kohlrabi

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Downy mildew (*Peronospora parasitica*)	2.0 - 4.8	Begin foliar applications prior to disease development and continue on a 5- to 10-day interval.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.

USE RESTRICTIONS

1) **Maximum Single Application Rate:** Do not exceed 4.8 fl oz per acre per application.
2) **Maximum Annual Rate:** Do not exceed 19.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a) Do not use for more than 33% of the total foliar fungicide applications or make more than four applications per crop, whichever is more restrictive.
   b) Do not exceed six foliar applications per acre per year for the same crop.
4) **Minimum Application Interval:** 5 days
5) **Pre-harvest Interval (PHI):** 0 days

7.2 Bulb Vegetables, Crop Group 3-07

Crops (including all cultivars, varieties, and/or hybrids of these)		
Chive, fresh leaves	Kurrat	Onion, green
Chive, Chinese, fresh leaves	Lady's leek	Onion, macrostem
Daylily, bulb	Leek	Onion, pearl
Elegans hosta	Leek, wild	Onion, potato, bulb
Fritillaria, bulb	Lily, bulb	Onion, tree, tops
Fritillaria, leaves	Onion, Beltsville bunching	Onion, Welsh, tops
Garlic, bulb	Onion, bulb	Shallot, bulb
Garlic, great-headed, bulb	Onion, Chinese, bulb	Shallot, fresh leaves
Garlic, serpent, bulb	Onion, fresh	

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Downy mildew (*Peronospora destructor*)	2.0 - 4.8	Begin foliar applications prior to disease development and continue on a 5- to 10-day interval.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.

USE RESTRICTIONS

1) **Maximum Single Application Rate:** Do not exceed 4.8 fl oz per acre per application.
2) **Maximum Annual Rate:** Do not exceed 19.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a. Do not use for more than 33% of the total foliar fungicide applications or make more than four applications per crop, whichever is more restrictive.
   b. Do not exceed six foliar applications per acre per year for the same crop.
4) **Minimum Application Interval:** 5 days
5) **Pre-harvest Interval (PHI):** 0 days

7.3 Cucurbit Vegetables, Crop Group 9

Crops (including all cultivars, varieties, and/or hybrids of these)

Chayote (fruit)
Chinese waxgourd (Chinese preserving melon)
Citron melon
Cucumber (field and greenhouse)
Gherkin
Gourd, edible
- Hyotan
- Cucuzza
- Hechima
- Chinese okra

***Momordica* spp.**
- Balsam apple
- Balsam pear
- Bittermelon
- Chinese cucumber

Muskmelon
- Cantaloupe
- Casaba
- Crenshaw melon
- Golden pershaw melon
- Honeydew melon
- Honey balls
- Mango melon
- Persian melon
- Pineapple melon
- Santa Claus melon
- Snake melon
- True cantaloupe

Pumpkin

Squash, summer (field and greenhouse)
- Crookneck squash
- Scallop squash
- Straightneck squash
- Vegetable marrow
- Zucchini

Squash, winter
- Acorn squash
- Butternut squash
- Calabaza
- Hubbard squash
- Spaghetti squash

Watermelon

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Downy mildew (*Pseudoperonospora cubensis*)	2.0 - 4.8	Begin foliar applications prior to disease development and continue on a 5- to 14-day interval.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.
Phytophthora Blight (*Phytophthora capsici*)	4.8 - 38.6	Apply at planting, in furrow, by drip or in transplant water.	See **Section 4.1.2** for at-planting, in-furrow, or transplant-water instructions. See **Section 4.1.3** for drip irrigation instructions.
	2.0 - 4.8	Begin foliar applications prior to disease development, and continue on a 3- to 14-day interval. For pickle fruit protection, apply with a copper fungicide starting at 1 inch fruit on 3- to 5-day intervals.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application,

			apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.
Downy Mildew Phytophthora Blight (foliar)	2.0 - 4.8	Begin foliar applications prior to disease development and continue on a 5- to 14-day interval.	**Greenhouse Production of edible peel cucurbits (cucumbers, summer squash):** Use a rate range of 0.07 - 0.167 fl oz (0.42 tsp - 1 tsp) per gallon of spray per 1518 sq ft.

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Orondis OD or Orondis with foliar applications of Orondis OD. Use either soil applications or foliar applications but not both for disease control.

USE RESTRICTIONS

1) **Maximum Single Application Rate:**
   a. **Foliar and Fruit Applications:** Do not exceed 4.8 fl oz per acre per application.
   b. **Soil Applications:** Do not exceed 38.6 fl oz per acre per application.
2) **Maximum Annual Rate:**
   a. **Foliar and Fruit Applications:** Do not exceed 19.2 fl oz per acre per year.
   b. **Soil Applications:** Do not exceed 77.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a. Do not make more than four applications per crop by either method.
   b. Do not exceed six foliar applications per acre per year for the same crop.
   c. Do not use for more than 33% of the total foliar fungicide applications.
   d. Do not use for more than 33% of the total soil fungicide applications.
4) **Minimum Application Interval:** 3 days for foliar applications; 7 days for soil applications
5) **Pre-harvest Interval (PHI):** 0 days

7.4 Fruiting Vegetables, Crop Group 8-10

Crops (including all cultivars, varieties, and/or hybrids of these)		
African eggplant Bush tomato Cocona Currant tomato Eggplant Garden huckleberry Goji berry Groundcherry	Martynia Naranjilla Okra Pea eggplant Pepino Pepper, bell (field and greenhouse)	Pepper, non-bell (field and greenhouse) Roselle Scarlet eggplant Sunberry Tomatillo Tomato (field and greenhouse) Tree tomato

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Buckeye Rot (*Phytophthora parasitica*) Late Blight (*Phytophthora infestans*) Pepper Downy Mildew (*Peronospora tabacina*) Phytophthora Blight (*Phytophthora capsici*)	2.0 - 4.8	Begin foliar applications prior to disease development and continue on a 5- to 14-day interval.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.
Buckeye Rot Late Blight Phytophthora Blight (foliar)	2.0 - 4.8	Begin foliar applications prior to disease development and continue on a 5- to 14-day interval.	**Greenhouse Production of bell and non-bell peppers and tomatoes:** Use a rate range of 0.07 - 0.167 fl oz (0.42 tsp - 1 tsp) per gallon of spray per 1518 sq ft.
Phytophthora Blight (*Phytophthora capsici*)	4.8 - 38.6	Apply at planting, in furrow, by drip or in transplant water.	See **Section 4.1.2** for at-planting, in-furrow, or transplant-water instructions. See **Section 4.1.3** for drip irrigation instructions.

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Orondis OD or Orondis with foliar applications of Orondis OD. Use either soil applications or foliar applications but not both for disease control.

USE RESTRICTIONS

1) **Maximum Single Application Rate:**
   a. **Foliar Applications:** Do not exceed 4.8 fl oz per acre per application.
   b. **Soil Applications:** Do not exceed 38.6 fl oz per acre per application.
2) **Maximum Annual Rate:**
   a. **Foliar Applications:** Do not exceed 19.2 fl oz per acre per year.
   b. **Soil Applications:** Do not exceed 77.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a. Do not make more than four applications per crop by either method.

b. Do not exceed six foliar applications per acre per year for the same crop.
c. Do not use for more than 33% of the total soil fungicide applications.
d. Do not use for more than 33% of the total foliar fungicide applications.

4) **Minimum Application Interval:** 5 days for foliar applications; 7 days for soil applications
5) **Pre-harvest Interval (PHI):** 0 days

7.5 Ginseng

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Phytophthora Root Rot (*Phytophthora cactorum*)	4.8 - 38.6	Begin foliar applications prior to disease development, and continue on a 14-day interval.	Use the higher rates for heavy disease pressure conditions and susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.

USE RESTRICTIONS

1) **Maximum Single Application Rate:** Do not exceed 38.6 fl oz per acre per application.
2) **Maximum Annual Rate:** Do not exceed 77.2 fl oz per acre per year.
3) **Maximum Number of Applications:** Do not make more than 4 applications per year.
4) **Minimum Application Interval:** 14 days
5) Not for use on Ginseng in California.
6) **Pre-harvest Interval (PHI):** 14 days

7.6 Leafy Greens (Crop Subgroup 4A)

Crops (including all cultivars, varieties, and/or hybrids of these)		
Amaranth	Cress, upland	Purslane, garden
Arugula	Dandelion	Purslane, winter
Chervil	Dock	Radicchio
Chrysanthemum, edible-leaved	Endive	Spinach
Chrysanthemum, garland	Lettuce, head and leaf	Spinach, New Zealand
Corn salad	Orach	Spinach, vine
Cress, garden	Parsley	

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Downy Mildew (*Bremia lactucae*)	9.6 - 38.6	Apply at planting, in furrow, by drip or in transplant water.	See **Section 4.1.2** for at-planting, in-furrow, or transplant-water instructions. See **Section 4.1.3** for drip irrigation instructions.
	2.0 - 4.8	Begin foliar applications prior to disease development, and continue on a 3- to 14-day interval.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.
Downy Mildew (*Peronospora farinosa*)	2.4 - 4.8	Begin applications prior to disease development, and continue on a 3- to 10-day interval.	

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Orondis OD or Orondis with foliar applications of Orondis OD. Use either soil applications or foliar applications but not both for disease control.

USE RESTRICTIONS

1) **Maximum Single Application Rate:**
   a. **Foliar Applications:** Do not exceed 4.8 fl oz per acre per application.
   b. **Soil Applications:** Do not exceed 38.6 fl oz per acre per application.
2) **Maximum Annual Rate:**
   a. **Foliar Applications:** Do not exceed 19.2 fl oz per acre per year.
   b. **Soil Applications:** Do not exceed 77.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a. Do not make more than four applications per crop by either method.
   b. Do not exceed six foliar applications per acre per year for the same crop.
   c. Do not use for more than 33% of the total foliar fungicide applications.
   d. Do not use for more than 33% of the total soil fungicide applications.
4) **Minimum Application Interval:** 3 days for foliar applications; 7 days for soil applications
5) **Pre-harvest Interval (PHI):** 0 days

7.7 Peas, Succulent Shelled and Edible-Podded

Crops (including all cultivars, varieties, and/or hybrids of these)			
***Pisum* spp.** Dwarf pea Edible-pod pea	English pea Garden pea Green pea	Snow pea Sugar snap pea	
Target Disease	**Rate (fl oz/A)**	**Application Timing**	**Use Directions**
Downy Mildew (*Peronospora viciae*, *Phytophthora phaseoli*)	2.4 - 4.8	Begin applications prior to disease development, and continue on a 5- to 7-day interval.	Use the higher rate when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.

USE RESTRICTIONS

1) **Maximum Single Application Rate:** Do not exceed 4.8 fl oz per acre per application.
2) **Maximum Annual Rate:** Do not exceed 19.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a. Do not use for more than 33% of the total foliar fungicide applications or make more than four applications per crop, whichever is more restrictive.
   b. Do not exceed six foliar applications per acre per year for the same crop.
4) **Minimum Application Interval:** 5 days
5) Not for use on Succulent Shelled and Edible-Podded Peas in California.
6) **Pre-harvest Interval (PHI):** 0 days

7.8 Tobacco

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Black Shank (*Phytophthora parasitica* var. *nicotianae*)	4.8	Apply as a foliar spray to the tobacco transplants in the transplant tray 24-48 hours prior to transplanting.	Immediately water the spray off the foliage into the transplant tray soil, not watering past soil saturation. See **Section 4.1.2**.
	9.6 - 38.6	Apply at planting, in furrow, or in transplant water.	See **Section 4.1.2** for at-planting, in-furrow, or transplant-water instructions. See **Section 4.1.3** for drip irrigation instructions.
		Apply soil-directed or banded applications at 1st cultivation and layby.	See **Section 4.1.2**.
Blue Mold (*Peronospora tabacina*)	2.0 - 4.8	Begin applications prior to disease development, and continue on a 7- to 10-day interval.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Do not follow soil applications of Orondis OD or Orondis with foliar applications of Orondis OD. Use either soil applications or foliar applications but not both for disease control.

USE RESTRICTIONS

1) **Maximum Single Application Rate:**
   a. **Foliar Applications (including transplant tray application):** Do not exceed 4.8 fl oz per acre per application.
   b. **Soil or Soil-Directed Applications:** Do not exceed 38.6 fl oz per acre per application.
2) **Maximum Annual Rate:**
   a. **Foliar Applications:** Do not exceed 19.2 fl oz per acre per year.
   b. **Soil or Soil-Directed Applications (including transplant tray application):** Do not exceed 77.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a. Do not make more than four applications per crop by either method.
   b. Do not exceed six foliar applications per acre per year for the same crop.
   c. Do not use for more than 33% of the total foliar fungicide applications.
4) **Minimum Application Interval:** 7 days for all application types
5) Not for use on Tobacco in California

6) **Pre-harvest Interval (PHI):** 7 days

7.9 Tuberous and Corm Vegetables, Crop Subgroup 1C

Crops (including all cultivars, varieties, and/or hybrids of these)

Arracacha	Chayote (root)	Sweet potato
Arrowroot	Chufa	Tanier
Artichoke, Chinese	Dasheen (taro)	Turmeric
Artichoke, Jerusalem	Ginger	Yam bean
Canna, edible	Leren	Yam, true
Cassava, bitter and sweet	Potato	

Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Late Blight (*Phytophthora infestans*)	1.6 - 4.8	Begin applications prior to disease development, and continue on a 5- to 14-day interval.	Use the higher rates when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.
Pink Rot (*Phytophthora erythroseptica*)	6.8	Apply at nickel-sized tubers (flowering). Follow with a second application after 10-14 days.	For conventional ground application, apply at least 15 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of the foliage. For air-assisted ground application, apply at least 10 gallons per acre. For aerial application, apply at least 2 gallons per acre.

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.

USE RESTRICTIONS

1) **Maximum Single Application Rate:** Do not exceed 6.8 fl oz per acre per application.
2) **Maximum Annual Rate:** Do not exceed 27.2 fl oz per acre per year.
3) **Maximum Number of Applications:**
   a. Do not use for more than 33% of the total foliar fungicide applications or make more than four applications per crop, whichever is more restrictive.
   b. Do not exceed six foliar applications per acre per year for the same crop.
4) **Minimum Application Interval:** 5 days
5) Not for use on Tuberous and Corm Vegetables in California
6) **Pre-harvest Interval (PHI):** 5 days

8.0 STORAGE AND DISPOSAL

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage
Keep container closed when not in use. Always store pesticides in the original container only, away from other pesticides, food, pet food, feed, seed, fertilizers, and veterinary supplies. If a leaky container must be contained within another, mark the outer container to identify the contents. Storage areas must be locked and secure from vandalism, with precautionary signs posted. The storage area must be dry, well-lit, and well-ventilated. Keep pesticide storage areas clean. Clean up any spills promptly. Protect pesticide containers from extreme heat and cold. Store herbicides, insecticides and fungicides in separate areas within the storage unit. Place liquid formulations on lower shelves and dry formulations above. Maintaining a spill kit and fire extinguisher on hand and having emergency phone numbers posted will allow you to be prepared for emergencies. If spill cleanup PPE is stored nearby, but outside the pesticide storage area, it will be accessible when needed.

Pesticide Disposal
Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling [less than or equal to 5 gallons]
Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons – mini-bulk)
Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary

landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons – bulk]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean the container before final disposal, empty the remaining contents from this container into application or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

9.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

10.0 APPENDIX

10.1 Orondis OD Use Summary Table

IMPORTANT: The table below is a summary of the Crop Use Directions for Orondis OD. However, it is important for the user to read and follow the complete instructions contained within this label.

Crop or Crop Group or subgroup with examples	Maximum Rate per Application (fl oz/A)	Maximum Rate per Application (lb ai/A)	Minimum Application Interval (days)	Pre-Harvest Interval (PHI days)	Maximum Rate per Year (fl oz/A)	Maximum Rate per Year (lb ai/A)
Brassica, Head and Stem: cabbage, broccoli, cauliflower	4.8	0.03	5	0	19.2	0.12
Bulb Vegetables (Crop Group 3-07)	4.8	0.03	5	0	19.2	0.12
Cucurbit Vegetables (Crop Group 9): cucumber, cantaloupe, watermelon, squash	4.8 foliar or 38.6 soil	0.03 foliar or 0.25 soil	3 foliar or 7 soil	0	19.2 foliar or 77.2 soil	0.12 foliar or 0.50 soil
Fruiting Vegetables (Crop Group 8-10): tomato, pepper	4.8 foliar or 38.6 soil	0.03 foliar or 0.25 soil	5 foliar or 7 soil	0	19.2 foliar or 77.2 soil	0.12 foliar or 0.50 soil
Ginseng*	38.6	0.25	14	14	77.2	0.50
Leafy Greens (Crop Subgroup 4A): lettuce, spinach	4.8 foliar or 38.6 soil	0.03 foliar or 0.25 soil	3 foliar or 7 soil	0	19.2 foliar or 77.2 soil	0.12 foliar or 0.50 soil
Peas, succulent shelled and edible-podded*	4.8	0.03	5	0	19.2	0.12
Tobacco*	4.8 foliar or 38.6 soil	0.03 foliar or 0.25 soil	7	7	19.2 foliar or 77.2 soil	0.12 foliar or 0.50 soil
Tuberous and Corm vegetables* (Crop Subgroup 1C): potato	6.8	0.04	5	5	27.2	0.18

* Not for use on these crops in California.

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For non-emergency (e.g., current product information), call
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