OXATHIAPIPROLIN	GROUP	49	FUNGICIDE
CHLOROTHALONIL	GROUP	M05	FUNGICIDE

PULL HERE TO OPEN

Escanee QR para Español

Orondis® Opti

syngenta®

Fungicide

Active Ingredients:

Chlorothalonil* (tetrachloroisophthalonitrile) . . .	33.2%
Oxathiapiprolin**:	0.5%
Other Ingredients:	66.3%
Total:	100.0%

*CAS No. 1897-45-6
**CAS No. 1003318-67-9

Orondis® Opti is formulated as a suspension concentrate and contains 3.32 lb of chlorothalonil and 0.05 lb of oxathiapiprolin per gallon (400 g/L chlorothalonil and 6 g/L oxathiapiprolin).

KEEP OUT OF REACH OF CHILDREN.

DANGER/PELIGRO

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.
See First Aid statement visible on the container.

EPA Reg. No. 100-1591

EPA Est. 100-NE-001

SCP 1591A-L1D 0524
4239431

FIRST AID

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. Call a poison control center 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 center or doctor for further treatment advice.

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.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids. If in eyes, the upper and lower lids should be retracted and irrigated, and any particulate matter should be carefully removed from the conjunctival fornix. Irrigation should be continued until the conjunctival sac is neutral on pH testing with universal indicator paper. Fluorescein staining is required to reveal the extent of corneal or conjunctival epithelial loss. Topical antibiotic ointments are indicated when corneal epithelial damage is identified. Use of steroid eye drops is not advocated unless expressly requested by an ophthalmologist. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SYNGENTA HOTLINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call **1-800-888-8372.**

2.5 gallons

Net Contents

®

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1.0 FIRST AID

FIRST AID	
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. • Call a poison control center 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 center or doctor for further treatment advice.
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.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage. Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids. If in eyes, the upper and lower lids should be retracted and irrigated, and any particulate matter should be carefully removed from the conjunctival fornix. Irrigation should be continued until the conjunctival sac is neutral on pH testing with universal indicator paper. Fluorescein staining is required to reveal the extent of corneal or conjunctival epithelial loss. Topical antibiotic ointments are indicated when corneal epithelial damage is identified. Use of steroid eye drops is not advocated unless expressly requested by an ophthalmologist.	
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2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards to Humans and Domestic Animals

DANGER/PELIGRO

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Wear protective eyewear, such as goggles, face shield, or safety glasses. May be fatal if inhaled. Do not breathe spray mist. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Remove and wash contaminated clothing before reuse. 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:

- Protective eyewear (goggles, face shield, or safety glasses)
- NIOSH-approved respirator with an organic vapor (OV) cartridge with a combination R or P filter, with NIOSH approval number prefix TC–84A, or a NIOSH-approved powered air purifying respirator with organic vapor (OV) cartridge and combination HE filter with NIOSH approval number prefix TC-23C, or a NIOSH approved gas mask with an organic vapor canister with NIOSH approval number prefix TC–14G
- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or Viton™ ≥14 mils
- Shoes plus socks

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 CONTROLS

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.

2.2.3 USER SAFETY RECOMMENDATIONS

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

This product is toxic to aquatic invertebrates and wildlife. For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

2.3.1 GROUNDWATER ADVISORY

Chlorothalonil is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

2.3.2 SURFACE WATER ADVISORY

This product can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow groundwater, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

2.4 Physical or Chemical Hazards

Do not use with or store near any oxidizing agents. Hazardous chemical reactions may occur.

Attention: This product contains a chemical known to the state of California to cause cancer.

DIRECTIONS FOR USE

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

Orondis Opti must be used only in accordance with instructions and recommendations on this label, or in separately issued labeling or exemptions under FIFRA (Supplemental Labels, Special Local Need Registrations, 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, other persons, or pets, 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), 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 (WPS).

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 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:

- protective eyewear (goggles, face shield, or safety glasses)
- coveralls
- shoes plus socks
- chemical-resistant gloves made of any waterproof material: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils

Special Eye Irritation Provisions: Chlorothalonil in this product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6.5 days entry is permitted only when the following safety measures are provided:

(1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS required decontamination site intended for workers entering the treated area.

(2) Workers must be informed, in a manner they can understand:

- that residues in the treated area may be highly irritating to their eyes;
- that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes;
- that if they do get residues in their eyes, they should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water;
- how to operate the eyeflush container.

3.0 PRODUCT INFORMATION

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

- Orondis Opti is a suspension concentrate containing chlorothalonil and oxathiapiprolin for use by foliar application for the control or suppression of the diseases listed on this label.
- Orondis Opti can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control.
- See **Section 7.0** for specific crop/disease directions for use.

MODE OF ACTION

Orondis Opti contains two active ingredients: oxathiapiprolin, which inhibits an oxysterol-binding protein (OSBP) homologue, and chlorothalonil, which has a multisite mode of action, and may be used to delay or prevent the development of resistance to single site fungicides.

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 Opti 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 Opti may be used as part of an IPM program, which can include the use of disease-resistant crop varieties, biological control products, cultural practices, and disease forecasting systems which reduce unnecessary applications of pesticides and prevent 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

For resistance management, please note that Orondis Opti contains both a Group 49 oxathiapiprolin and Group M05 chlorothalonil fungicide. Any fungal population may contain individuals naturally resistant to Orondis Opti and other Group 49 or Group M05 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

Oxathiapiprolin inhibits an oxysterol-binding protein (OSBP) homologue. Oxysterol-binding proteins are implicated in the movement of lipids between membranes, among other processes. Inhibiting OSBP may disrupt other processes in the fungal cell, such as signaling, maintaining cell membranes, and the formation of more complex lipids that are essential for the cell to survive. Chlorothalonil, with a multisite mode of action, is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. Chlorothalonil may be used to delay or prevent the development of resistance to single-site fungicides.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of Orondis Opti or other Group 49 or Group M05 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide(s) from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use and crop rotation, and which 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. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance, contact Syngenta Crop Protection at 1-866-796-4368. You can also contact your pesticide distributor or university extension specialist to report resistance.

As part of a resistance management strategy:

- Orondis Opti applications are to be made preventatively.
- Do not tank-mix Orondis Opti with any fungicide for which resistance to the target disease has developed.

- Do not make more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Where 3 or more fungicide applications are made, do not use Orondis Opti (or any other FRAC 49-containing product) in more than 33% of the total fungicide applications, or a maximum of 4 applications, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).
- Do not apply more than 6 applications of Orondis Opti (or any other FRAC 49-containing product) per year on the same acreage.
- Do not follow soil applications of Orondis Gold (or any other FRAC 49-containing product) with foliar applications of Orondis Opti or Orondis Ultra (or any other FRAC 49-containing product).
- Do not combine different application methods (foliar and soil) when protecting a crop during a growing season.
- Do not use Orondis Opti (or any other FRAC 49-containing product) in nursery production of transplanted crops.

4.0 APPLICATION DIRECTIONS

4.1 Methods of Application

4.1.1 FOLIAR APPLICATION (INCLUDING GROUND APPLICATION, AERIAL APPLICATION, AND CHEMIGATION)

Apply Orondis Opti at rates specified in **Section 7.0**. Where permitted, applications can be made by ground, by air, and via chemigation as specified. Refer to **Section 4.5** for details of application by chemigation.

4.2 Application Equipment

4.2.1 SHIELDED SPRAYERS

- Shielding the boom or individual nozzles can reduce the effects of wind.
- 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 **Section 7.0** for application volume information.

- Thorough coverage is necessary to provide good disease control.
- Make no more spray solution than is needed for application.
- Avoid spray overlap, as crop injury may occur.
- For aerial application, apply in a minimum of 5 gallons of water per acre unless specified otherwise on this label.
- For ground application, apply in a minimum of 15 gallons of water per acre unless specified otherwise on this label.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.

4.4 Mixing Directions

4.4.1 ORONDIS OPTI ALONE

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

4.4.2 TANK-MIX PRECAUTIONS

- Do not combine Orondis Opti in spray tank with pesticides, adjuvants, surfactants, or fertilizers, unless your prior use has shown the combination physically compatible, effective, and noninjurious under your conditions of use.
- **Do not** combine Orondis Opti with *Bacillus thuringiensis* (DiPel® ES, DiPel ES-NT), Latron B-1956® or Latron AG-98® as phytotoxicity may result from the combination when applied to the crops on this label.
- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements for each product in the tank mixture.
- Apply at least the minimum labeled rate of each fungicide in the tank mix.
- The crop safety of all tank mixtures with Orondis Opti, which may include physically compatible pesticides, fertilizers, adjuvants, and/or additives, has not been tested.
- When using a tank mixture with Orondis Opti, 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 Opti 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 Opti with other tank-mixed pesticide, adjuvant or fertilizer partners. The recommended procedure for conducting 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 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 1/4 teaspoon or 1.2 mL of a commercially available tank-mix compatibility agent approved for this use (1/4 teaspoon is equivalent to 2 pt/100 gallons of spray solution). Close the lid, invert the jar, then 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, then 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 mL 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) Pre-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 OPTI IN TANK MIXTURES

- Always follow the tank-mix instructions of the most restrictive product label.
- Consult a Syngenta representative or local agricultural authorities for more information concerning tank mixtures.
- When using 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) (Orondis Opti)**
  6. Capsule suspension (CS)
  7. Suspoemulsion (SE)
  8. Oil dispersion (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)

4.5.1 APPLICATION DIRECTIONS FOR OVERHEAD IRRIGATION SYSTEMS

- Use only on crops for which chemigation is specified on this label.
- Use only with drive systems which provide uniform water distribution.
- Do not use end guns because of non-uniform application.
- Apply this product only through center-pivot, solid-set, hand-move, or moving-wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact state extension service specialists, equipment manufacturers, or chemigation experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Chemical tank and injector system should be thoroughly cleaned and flushed with clean water prior to use.
- Do not apply when winds are greater than 10-15 mph to avoid drift or wind skips.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Thorough coverage of foliage is required for good control.
- Good agitation should be maintained in the tank during the entire application period.
- Orondis Opti has not been sufficiently tested via irrigation systems to determine product efficacy.
- Best performance via irrigation is 0.1 to 0.25 inches of water per acre.

Center-Pivot Irrigation

- Determine the size of the area to be treated.
- Determine the time required to apply 1/8-1/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as specified by the equipment manufacturer. When applying Orondis Opti through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Orondis Opti required to treat the area covered by the irrigation system.
- Add the required amount of Orondis Opti and sufficient water to the solution tank to meet the injection time requirements.
- Make sure the system is fully charged with water before starting injection of the Orondis Opti solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Orondis Opti solution has cleared the sprinkler head.

Solid-Set, Hand-Move, and Moving-Wheel Irrigation

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30-minute interval. When applying Orondis Opti through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Orondis Opti needed to treat the area covered by the irrigation system.
- Add the required amount of Orondis Opti into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Orondis Opti solution has cleared the last sprinkler head.

4.5.2 OPERATING INSTRUCTIONS FOR CHEMIGATION

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back towards the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

4.5.3 SPECIFIC 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 (RPZ) backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ backflow preventer, discharge the water from the public water system 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 Opti fungicide as a continuous injection. In non-moving systems, inject Orondis Opti 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 Opti 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 Opti is flushed from system.

5.0 ROTATIONAL CROP RESTRICTIONS

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

Crop, Crop Group, or Subgroup	Plant-back Interval
Almond Asparagus Brassica, Head and Stem (Crop Subgroup 5A) Blueberries Bulb Vegetables (Crop Group 3-07) Cucurbit Vegetables (Crop Group 9) Filberts Fruiting Vegetables, except Tomato Ginseng Herbs and Spices (Crop Group 19) Oilseed (Crop Group 20) Papaya Peas, Edible-Podded Peas, Succulent Shelled Pistachio Potato Strawberries Tobacco	0 days
Cereals (Crop Group 15,16) Grass Animal Feeds (Crop Group 17) Peanuts Sugarcane	30 days
Legume Vegetables, except succulent shelled and edible-podded peas Nongrass Animal Feeds (Crop Group 18) All other crops not listed	180 days

6.0 RESTRICTIONS AND PRECAUTIONS

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

6.1 Use Restrictions

- **DO NOT** use for residential applications. Use this product only for commercial and farm applications.
- **DO NOT** use on greenhouse-grown crops.
- Orondis Opti must be used only in accordance with this label.
- **DO NOT** formulate this product into other end-use products.
- **DO NOT** use Orondis Opti in greenhouse production.

6.2 Spray Drift Management

- 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.
- To avoid spray drift, do not apply when conditions favor drift beyond the target area.
- Avoid spray overlap, as injury may occur.

6.3 Spray Drift Advisories

- THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
- BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

6.3.1 IMPORTANCE OF DROPLET SIZE

- An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control.
- While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.
- The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage.
- 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.

6.3.2 CONTROLLING DROPLET SIZE – GROUND BOOM

- **Volume-** Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure-** Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle-** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

6.3.3 CONTROLLING DROPLET SIZE – AIRCRAFT

- **Adjust Nozzles**- Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

6.3.4 BOOM HEIGHT – GROUND BOOM

- Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage.
- For ground equipment, the boom should remain level with the crop and have minimal bounce.

6.3.5 RELEASE HEIGHT – AIRCRAFT

- Higher release heights increase the potential for spray drift.
- When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

6.3.6 SHIELDED SPRAYERS

- Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers.
- Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

6.3.7 TEMPERATURE AND HUMIDITY

- When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

6.3.8 TEMPERATURE INVERSIONS

- Drift potential is high during a temperature inversion.
- Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.
- The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator.
- Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.
- Avoid applications during temperature inversions.

6.3.9 WIND

- Drift potential generally increases with wind speed.
- AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.
- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

6.3.10 BOOM-LESS GROUND APPLICATIONS

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.
- **Handheld Technology Applications:** Take precautions to minimize spray drift.

6.3.11 SENSITIVE AREAS

- The 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).

6.3.12 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, Crop Subgroup 5A (except cavalo broccolo)

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

Target Disease	Rate (pt/A)	Application Timing	Use Directions
Alternaria leaf spot (*Alternaria* spp.) Downy mildew (*Peronospora parasitica*)	1.75 – 2.7*	Begin foliar applications prior to disease development. Repeat on a 7- to 10-day interval.	Apply by ground, air, or chemigation. Use a higher rate when disease is present, for longer application intervals, or for susceptible varieties. For enhanced control of *Alternaria*, add a chlorothalonil-containing product to the spray mixture. Do not exceed a total of 8.8 lb ai/A/year of chlorothalonil-containing products. 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 5 gallons per acre.

*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil
*2.7 pt is equivalent to 0.02 lb ai oxathiapiprolin and 1.13 lb ai chlorothalonil

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 oxathiapiprolin (or any other FRAC 49-containing product) with foliar applications of Orondis Opti (or any other FRAC 49-containing product).
- Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table.
3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year.
4) **Minimum Application Interval:** 7 days
5) **Maximum Annual Rate:** 10.8 pt/A/year (0.07 lb oxathiapiprolin and 4.5 lb chlorothalonil)
   a. Do not apply more than 0.12 lb ai/A/year of oxathiapiprolin-containing products.
   b. Do not apply more than 8.8 lb ai/A/year of chlorothalonil-containing products.
6) **Pre-harvest Interval (PHI):** 7 days

7.2 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 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** Crookneck squash Scallop squash Straightneck squash Vegetable marrow Zucchini **Squash, winter** Acorn squash Butternut squash Calabaza Hubbard squash Spaghetti squash Watermelon

Target Disease	Rate (pt/A)	Application Timing	Use Directions
Alternaria leaf blight (*A. cucumerina*) Alternaria leaf spot (*A. alternata*) Anthracnose (*Colletotrichum* spp.) Cercospora leaf spot (*C. citrullina*) Downy mildew (*Pseudoperonospora cubensis*) Gummy stem blight/vine decline (*Didymella bryoniae*) Powdery mildew (*Sphaerotheca* only) Scab (*Cladosporium cucumerinum*) Target spot (*Corynespora cassiicola*)	1.75 – 5.0*	Begin foliar applications prior to disease development and continue on a 7- to 14-day interval.	Apply by ground, air, or chemigation. Use in sufficient water to obtain adequate coverage. Use a higher rate when disease is present, for longer application intervals, or for susceptible varieties. For enhanced control of leaf spots and other non-Oomycete diseases listed, add a chlorothalonil-containing product to the spray mixture. Do not exceed a total of 15.75 lb ai/A/year of chlorothalonil-containing products. 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 5 gallons per acre.

*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil
*5.0 pt is equivalent to 0.03 lb ai oxathiapiprolin and 2.08 lb ai chlorothalonil

continued…

7.2 Cucurbit Vegetables, Crop Group 9 *(continued)*

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 oxathiapiprolin (or any other FRAC 49-containing product) with foliar applications of Orondis Opti (or any other FRAC 49-containing product).
- Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).

Precautions:

- Spraying mature watermelons may result in sunburn of the upper surface of the fruit. Do not apply Orondis Opti to watermelons when any of the following conditions are present:
  - o Intense heat and sunlight
  - o Drought conditions
  - o Poor vine canopy
  - o Other crop and environmental conditions which may be conducive to increased natural sunburn
- Do not combine Orondis Opti with anything except water for application to watermelons unless your prior use has shown the combination to be non-injurious to watermelons under your conditions of use.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table.
3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year.
4) **Minimum Application Interval:** 7 days
5) **Maximum Annual Rate:** 20 pt/A/year (0.12 lb oxathiapiprolin and 8.32 lb chlorothalonil)
   a. **Do not** apply more than 0.12 lb ai/A/year of oxathiapiprolin-containing products.
   b. **Do not** apply more than 15.75 lb ai/A/year of chlorothalonil-containing products.
6) **Pre-harvest Interval (PHI):** 0 days

7.3 Fruiting Vegetables (except Tomato)

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

Eggplant	Pepino	Pepper, non-bell
Groundcherry	Pepper, bell	Tomatillo
Okra		

Target Disease	Rate (pt/A)	Application Timing	Use Directions
Anthracnose (*Colletotrichum* spp.) Botrytis leaf mold (*Botrytis cinerea*) Buckeye rot (*Phytophthora parasitica*) Cercospora leaf spot (*Cercospora* spp.) Late blight (*Phytophthora infestans*) Pepper downy mildew (*Peronospora tabacina*) Powdery mildew (*Leveillula taurica*)	1.75 – 2.7*	Begin foliar applications when disease is expected. Repeat applications on a 7- to 10-day interval.	Apply by ground, air, or chemigation. Use a higher rate when disease is present, for longer application intervals, or for susceptible varieties. For enhanced control of leaf spots and other non-Oomycete diseases listed add a chlorothalonil-containing product to the spray mixture. Do not exceed a total of 9.0 lb ai/A/year of chlorothalonil-containing products. 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 5 gallons per acre. Use in sufficient water to obtain thorough coverage.

*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil
*2.7 pt is equivalent to 0.02 lb ai oxathiapiprolin and 1.13 lb ai chlorothalonil

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 oxathiapiprolin (or any other FRAC 49-containing product) with foliar applications of Orondis Opti (or any other FRAC 49-containing product).
- Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table.
3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year.
4) **Minimum Application Interval:** 7 days
5) **Maximum Annual Rate:** 10.8 pt/A/year (0.07 lb oxathiapiprolin and 4.5 lb chlorothalonil)
   a. **Do not** apply more than 0.12 lb ai/A/year of oxathiapiprolin-containing products.
   b. **Do not** apply more than 9.0 lb ai/A/year of chlorothalonil-containing products.
6) **Pre-harvest Interval (PHI):** 3 days

7.4 Ginseng

Crops (including all cultivars, varieties, and/or hybrids of these)			
Ginseng			
Target Disease	**Rate (pt/A)**	**Application Timing**	**Use Directions**
Alternaria blight (*Alternaria panax*) Gray mold (*Botrytis cinerea*) Phytophthora leaf blight (*Phytophthora cactorum*)	1.75 – 3.6*	Begin foliar applications when disease is expected. Repeat applications on a 14-day interval.	Apply by ground or chemigation. Use a higher rate when disease is present, for longer application intervals, or for susceptible varieties. For conventional ground application, apply in at least 50 gallons per acre to ensure thorough coverage of the foliage.
*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil *3.6 pt is equivalent to 0.02 lb ai oxathiapiprolin and 1.50 lb ai chlorothalonil			
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 oxathiapiprolin (or any other FRAC 49-containing product) with foliar applications of Orondis Opti (or any other FRAC 49-containing product). • Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table. 3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year. 4) **Minimum Application Interval:** 14 days 5) **Maximum Annual Rate:** 14.4 pt/A/year (0.08 lb oxathiapiprolin and 6.0 lb chlorothalonil) a. Do not apply more than 0.5 lb ai/A/year of oxathiapiprolin-containing products. b. Do not apply more than 12.0 lb ai/A/year of chlorothalonil-containing products. 6) Do not use on Ginseng in California. 7) **Pre-harvest Interval (PHI):** 14 days			

7.5 Onion (Dry Bulb) and Garlic

Crops (including all cultivars, varieties, and/or hybrids of these)			
Onion (dry bulb)		Garlic	
Target Disease	**Rate (pt/A)**	**Application Timing**	**Use Directions**
Botrytis leaf blight (*Botrytis* spp.) Downy mildew (*Peronospora destructor*) Purple blotch (*Alternia porri*)	1.75 – 5.0*	Begin foliar applications prior to disease development and continue on a 7- to 10-day interval.	Apply by ground, air, or chemigation. Use a higher rate when disease is present, for longer application intervals, or for susceptible varieties. For enhanced control of leaf spots and other non-Oomycete diseases listed add a chlorothalonil-containing product to the spray mixture. Do not exceed a total of 15.0 lb ai/A/year of chlorothalonil-containing products. 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 5 gallons per acre.
*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil *5.0 pt is equivalent to 0.03 lb ai oxathiapiprolin and 2.08 lb ai chlorothalonil			
Resistance Management: • Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action. • Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table. 3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year. 4) **Minimum Application Interval:** 7 days 5) **Maximum Annual Rate:** 20 pt/A/year (0.12 lb oxathiapiprolin and 8.32 lb chlorothalonil) a. Do not apply more than 0.12 lb ai/A/year of oxathiapiprolin-containing products. b. Do not apply more than 15 lb ai/A/year of chlorothalonil-containing products. 6) **Pre-harvest Interval (PHI):** 7 days			

7.6 Onion (Green Bunching), Leek, Shallot, Onion and Garlic (Grown for Seed)

Crops (including all cultivars, varieties, and/or hybrids of these)			
Onion (green bunching) Leek		Shallot Onion and Garlic (grown for seed)	
Target Disease	**Rate (pt/A)**	**Application Timing**	**Use Directions**
Botrytis leaf blight (*Botrytis* spp.) Downy mildew (*Peronospora destructor*) Purple blotch (*Alternaria porri*)	1.75 – 4.0*	Begin foliar applications prior to disease development and continue on a 7- to 10-day interval.	Apply by ground, air, or chemigation. Use a higher rate when disease is present, for longer application intervals, or for susceptible varieties. Use the high rate and a 7-day schedule of applications when heavy dew or rain persists. For enhanced control of leaf spots and other non-Oomycete diseases listed add a chlorothalonil-containing product to the spray mixture. Do not exceed a total of 6.75 lb ai/A/year of chlorothalonil-containing products. 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 5 gallons per acre.

*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil
*4.0 pt is equivalent to 0.02 lb ai oxathiapiprolin and 1.67 lb ai chlorothalonil

Resistance Management:

- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table.
3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year.
4) **Minimum Application Interval:** 7 days
5) **Maximum Annual Rate:** 16 pt/A/year (0.08 lb oxathiapiprolin and 6.68 lb chlorothalonil)
   a. Do not apply more than 0.12 lb ai/A/year of oxathiapiprolin-containing products.
   b. Do not apply more than 6.75 lb ai/A/year of chlorothalonil-containing products.
6) **Pre-harvest Interval (PHI):**
   a. **Garlic grown for seed:** 7 days
   b. **Green bunching onions, leeks, or shallots:** 14 days

7.7 Potato

Crops (including all cultivars, varieties, and/or hybrids of these)			
Potato			
Target Disease	**Rate (pt/A)**	**Application Timing**	**Use Directions**
Black dot (*Colletotrichum coccodes*) Botrytis vine rot (*B. cinerea*) Early blight (*Alternaria solani*) Late Blight (*Phytophthora infestans*)	1.75 - 2.7*	Begin foliar applications prior to disease development, and continue on a 5- to 14-day interval.	Apply by ground, air, or chemigation. For management of late blight, use a higher rate when conditions are favorable for disease, for longer application intervals, or for susceptible varieties. For conventional ground application, apply at least 15-20 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 5 gallons per acre. Do not exceed a 10-day interval between applications when using chemigation.
*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil *2.7 pt is equivalent to 0.02 lb ai oxathiapiprolin and 1.13 lb ai chlorothalonil			
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 oxathiapiprolin (or any other FRAC 49-containing product) with foliar applications of Orondis Opti (or any other FRAC 49-containing product). • Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table. 3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year. 4) **Minimum Application Interval:** 5 days 5) **Maximum Annual Rate:** 10.8 pt/A/year (0.07 lb oxathiapiprolin and 4.5 lb chlorothalonil) a. **Do not** apply more than 0.12 lb ai/A/year of oxathiapiprolin-containing products. b. **Do not** apply more than 11.25 lb ai/A/year of chlorothalonil-containing products. 6) **Pre-harvest Interval (PHI):** 7 days			

7.8 Tomato

Crops (including all cultivars, varieties, and/or hybrids of these)			
Tomato			
Target Disease	**Rate (pt/A)**	**Application Timing**	**Use Directions**
FOLIAGE Buckeye rot (*Phytophthora parasitica*) Early blight (*Alternaria solani*) Gray leaf mold (*Fulvia fulva; Cladosporium* spp.) Gray leaf spot (*Stemphyllium botryosum*) Late Blight (*Phytophthora infestans*) Septoria leaf spot (*S. lycopersici*) Target spot (*Corynespora cassiicola*)	1.75 – 3.6*	Begin foliar applications when dew or rain occurs and disease threatens. Apply on a 7- to 10-day interval for foliage diseases.	Apply by ground, air, or chemigation. Use a higher rate when disease is present, for longer application intervals, or for susceptible varieties. Use the highest rate and shortest interval specified when disease conditions are severe. For enhanced control of leaf spots and other non-Oomycete diseases listed add a chlorothalonil-containing product to the spray mixture. Do not exceed a total of 15.0 lb ai/A/year of chlorothalonil-containing products. 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 5 gallons per acre. Apply in sufficient water to obtain thorough coverage.
FRUIT Alternaria fruit rot (black mold) (*A. alternata*) Anthracnose (*Colletotrichum* spp.) Botrytis gray mold (*B. cinerea*) Late blight fruit rot (*P. infestans*) Rhizoctonia fruit rot (*R. solani*)	1.75 – 4.5*	For fruit diseases, begin at fruit set and apply on a 7- to 14-day interval.	
*1.75 pt is equivalent to 0.01 lb ai oxathiapiprolin and 0.73 lb ai chlorothalonil *3.6 pt is equivalent to 0.02 lb ai oxathiapiprolin and 1.50 lb ai chlorothalonil *4.5 pt is equivalent to 0.03 lb ai oxathiapiprolin and 1.88 lb ai chlorothalonil			
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 oxathiapiprolin (or any other FRAC 49-containing product) with foliar applications of Orondis Opti (or any other FRAC 49-containing product). • Where 3 or more fungicide applications are made, use Orondis Opti (or any other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications per planting, whichever is fewer. Where less than 3 fungicide applications are made, do not make more than 1 application of Orondis Opti (or any other FRAC 49-containing product).			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate: DO NOT** exceed the maximum rate listed in the table. 3) **Maximum Number of Applications per Year: DO NOT** make more than 4 applications at the maximum rate per year. 4) **Minimum Application Interval:** 7 days 5) **Maximum Annual Rate:** 18 pt/A/year (0.11 lb oxathiapiprolin and 7.50 lb chlorothalonil) a. **Do not** apply more than 0.12 lb ai/A/year of oxathiapiprolin-containing products. b. **Do not** apply more than 15 lb ai/A/year of chlorothalonil-containing products. 6) **Pre-harvest Interval (PHI):** 0 days			

8.0 STORAGE AND DISPOSAL

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool place. Protect from excessive heat.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

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)

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)

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.

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the SYNGENTA Logo and the PURPOSE ICON
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Latron B-1956® and Latron AG-98® are trademarks of J.R. Simplot Company

Viton™ is a trademark of The Chemours Company FC, LLC

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For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-866-796-4368.

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 1591A-L1D 0524
4239431

OXATHIAPIPROLIN	GROUP	49	FUNGICIDE
CHLOROTHALONIL	GROUP	M05	FUNGICIDE

Orondis® Opti

Fungicide

Active Ingredients:

Chlorothalonil* (tetrachloroisophthalonitrile)	33.2%
Oxathiapiprolin**:	0.5%
Other Ingredients:	66.3%
Total:	100.0%

*CAS No. 1897-45-6
**CAS No. 1003318-67-9

Orondis® Opti is formulated as a suspension concentrate and contains 3.32 lb of chlorothalonil and 0.05 lb of oxathiapiprolin per gallon (400 g/L chlorothalonil and 6 g/L oxathiapiprolin).

KEEP OUT OF REACH OF CHILDREN.

DANGER/PELIGRO

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1591
EPA Est. 100-NE-001

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Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 1591A-L1D 0524 4239431

2.5 gallons

Net Contents

(01) 0 07 02941 58892 9

FIRST AID

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. Call a poison control center 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 center or doctor for further treatment advice.

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.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids. If in eyes, the upper and lower lids should be retracted and irrigated, and any particulate matter should be carefully removed from the conjunctival fornix. Irrigation should be continued until the conjunctival sac is neutral on pH testing with universal indicator paper. Fluorescein staining is required to reveal the extent of corneal or conjunctival epithelial loss. Topical antibiotic ointments are indicated when corneal epithelial damage is identified. Use of steroid eye drops is not advocated unless expressly requested by an ophthalmologist.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SYNGENTA HOTLINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER/PELIGRO

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Wear protective eyewear, such as goggles, face shield, or safety glasses. May be fatal if inhaled. Do not breathe spray mist. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Environmental Hazards: This product is toxic to aquatic invertebrates and wildlife. For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Groundwater Advisory: Chlorothalonil is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This product can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow groundwater, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Physical or Chemical Hazards: Do not use with or store near any oxidizing agents. Hazardous chemical reactions may occur.

Attention: This product contains a chemical known to the state of California to cause cancer.

STORAGE AND DISPOSAL

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