



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

November 13, 2020

Nikolaus Zenz, Ph.D.  
Regulatory Product Manager  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, NC 27419

Subject: PRIA Label Amendment – Related to Petition 9F8759 and 9F8736; Addition of new uses on Tree Nut Crop Group 14-12 for both mefenoxam and oxathiapiprolin  
Product Name: Orondis Gold  
EPA Registration Number: 100-1614  
Application Date: 04/15/2019, 3/20/2019, and 1/27/2019  
Decision Number: 550379, 550159, and 548477

Dear Dr. Zenz:

The application referred to above, submitted under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable under FIFRA sec 3 (c)(5). You must 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.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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 FIFRA 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). The 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.

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EPA Reg. No. 100-1614  
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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Marcel Howard by phone at (703)305-6784, or via email at [howard.marcel@epa.gov](mailto:howard.marcel@epa.gov).

Sincerely,

A handwritten signature in cursive script that reads "C. Giles-Parker".

Cynthia Giles-Parker, Chief  
Fungicide Branch  
Registration Division (7505P)

Enclosure – stamped “accepted” label

**ACCEPTED**

11/13/2020

**SUPPLEMENTAL LABELING**

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1614

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

**SCP 1614**

<b>OXATHIPIPROLIN</b>	<b>GROUP</b>	<b>49</b>	<b>FUNGICIDE</b>
<b>MEFENOXAM</b>	<b>GROUP</b>	<b>4</b>	<b>FUNGICIDE</b>

**Orondis® Gold**

**Fungicide**

**This supplemental label expires on 11/09/2023 and must not be used or distributed after this date.**

Active Ingredient:	
Oxathiapiprolin <sup>1</sup> :	3.29%
Mefenoxam <sup>2</sup> :	9.89%
Other Ingredients:	86.82%
Total:	100.00%

<sup>1</sup>CAS No. 1003318-67-9

<sup>2</sup>CAS Nos. 70630-17-0 and 69516-34-3

Orondis® Gold is formulated as a dispersible concentrate (DC) and contains 0.29 lb of oxathiapiprolin and 0.88lb of mefenoxam per gallon.

**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).

**EPA Reg. No. 100-1614**

All applicable directions, restrictions, and precautions on the EPA-registered label are to be followed. Before using Orondis Gold as permitted according to this supplemental label, read and follow all applicable directions, restrictions, and precautions on the EPA-registered label on or attached to the pesticide product container. This Supplemental Labeling contains revised use instructions and/or restrictions that may be different from those that appear on the container label. This Supplemental Labeling must be in the possession of the user at the time of pesticide application. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.



## DIRECTIONS FOR USE

### Bushberry Subgroup 13-07B, except lowbush blueberry

Crops (including all cultivars, varieties, and/or hybrids of these)			
Aronia berry[*] Blueberry, highbush[*] Buffalo currant[*] Chilean Guava[*] Cranberry, highbush[*] Currant, Black[*] Currant, Red[*] Elderberry[*] European barberry[*]	Gooseberry[*] Honeysuckle, edible[*] Huckleberry[*] Jostaberry[*] Juneberry (Saskatoon berry)[*] Lingonberry[*] Native currant[*] Salal[*] Sea buckthorn[*]		
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Phytophthora root rot ( <i>Phytophthora</i> spp.)	20.0 – 55.0**	<p><b>Soil Application:</b></p> <p><b>New Plantings:</b> Make first application at planting, and a second at least 30 days later, and coinciding with a period favorable for root rot development.</p> <p><b>Established Plantings:</b> Make first application before plants start to grow in the spring, and a second at least 30 days later, and coinciding with a period favorable for root rot development.</p>	<p>[(*Not for use in California)]</p> <p>Apply as a drench, or soil directed spray, or through irrigation water (micro-sprinkler, drip or flood).</p> <p>For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the application method does not move the product to the root zone, and rain is not imminent, then follow with irrigation.</p> <p>See <b>Section 4.1.2</b> for at-planting, or transplant water instructions. See <b>Section 4.5</b> for drip irrigation instructions.</p> <p>[Use the higher rate in fields with a history of Phytophthora disease.]</p> <p>[Orondis Gold will not revitalize plants showing moderate to severe root rot symptoms.]</p> <p>Use Orondis Gold in conjunction with good cultural practices to manage disease.</p>
**20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam **55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mefenoxam			

<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> <li>Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.</li> </ul>
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>
<b>USE RESTRICTIONS</b>
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed maximum rate listed in the table.</li> <li><b>Maximum Number of Applications: DO NOT</b> make more than two Orondis Gold applications per year.</li> <li><b>Minimum Application Interval:</b> 30 days</li> <li><b>Maximum Annual Rate:</b> 110.0 fl oz/A/year (equivalent to 0.25 lb ai/A/year oxathiapiprolin and 0.76 lb ai/A/year mefenoxam)             <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.5 lb ai/A/year of soil-applied oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 3.6 lb ai/A year of soil-applied mefenoxam-containing products.</li> </ol> </li> <li><b>DO NOT</b> use in nursery production of transplanted crops.</li> <li><b>Pre-harvest Interval (PHI):</b> 1 day</li> </ol>

## Strawberry

Crops (including all cultivars, varieties, and/or hybrids of these)			
Strawberry			
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Crown rot ( <i>Phytophthora cactorum</i> )  Red stele root rot ( <i>Phytophthora fragariae</i> )	20.0 – 62.0**	<p><b>Soil Application:</b> Make up to two applications by drip application.</p> <p><b>New Plantings:</b> Make the first application soon after planting when overhead watering for plant establishment has been completed, and a second application 30 days before the beginning of harvest or at fruit set.</p> <p><b>Established Plantings:</b> Make the first application in the spring before first bloom, and the second after harvest.</p>	See <b>Section 4.5</b> for drip irrigation instructions.  [Use the higher rate in fields with a history of <i>Phytophthora</i> disease.]
Leather rot ( <i>Phytophthora cactorum</i> )	7.0 – 13.9**	<p><b>Foliar Application:</b></p> <p><i>Provided that Orondis Gold was NOT used via soil application,</i>            Make up to two foliar/soil-directed applications, the first at fruit set and, if required, a second during harvest.</p>	Apply by ground application or overhead chemigation.  [Use the higher rate in fields with a history of <i>Phytophthora</i> disease.]

<p>**7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam  **13.9 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.10 lb mefenoxam  **20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam  **62.0 fl oz is equivalent to 0.14 lb oxathiapiprolin; 0.43 lb mefenoxam</p>
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1</b>.</li> <li>Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.</li> <li><b>DO NOT</b> follow soil applications of Orondis Gold (or any other FRAC 49-containing product) with foliar/soil-directed applications of Orondis Gold (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.</li> </ul>
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2</b>.</li> </ul>
<p><b>USE RESTRICTIONS</b></p>
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed the maximum rate listed in the table for the application type being used.</li> <li><b>Maximum Number of Applications per Year:</b> <ol style="list-style-type: none"> <li><b>Soil applications: DO NOT</b> make more than 2 applications at the maximum rate per year.</li> <li><b>Foliar/Fruit Application: DO NOT</b> make more than 2 application at the maximum rate per year.</li> </ol> </li> <li><b>Minimum Application Interval:</b> 30 days</li> <li><b>Maximum Annual Rate:</b> 124.0 fl oz/A/year (equivalent to 0.28 lb ai/A/year oxathiapiprolin and 0.85 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.29 lb ai/A/year of soil-applied or 0.06 lb ai/A/year of foliar/soil-directed oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 1.5 lb ai/A/year of soil-applied or 0.19 lb ai/A/year of foliar/soil-directed mefenoxam-containing products.</li> </ol> </li> <li><b>DO NOT</b> use in nursery production.</li> <li><b>Pre-harvest Interval (PHI):</b> <ol style="list-style-type: none"> <li>28 days (soil applications only)</li> <li>0 days (foliar/soil-directed applications only)</li> </ol> </li> </ol>

## Hops

Crops (including all cultivars, varieties, and/or hybrids)			
Hops [(Not for use in California)]			
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Downy mildew (soil/crown phase) ( <i>Pseudoperonospora humuli</i> )	20.0-36.0**	<b>Soil Application:</b>  <b>New Plantings</b>  Make a single soil application at planting.	Apply as a drench, or soil directed spray, or through irrigation water (micro-sprinkler, or drip).  For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the application method does not move the product to the root zone, and rain is not imminent, then follow with irrigation.
Phytophthora root rot ( <i>Phytophthora</i> spp.)		<b>Established Plantings</b>  Make a single soil application as soon as plants begin growing in the spring.	See <b>Section 4.1.2</b> for at-planting instructions. See <b>Section 4.5</b> for drip

			irrigation instructions.  Use the higher rate in fields with a history of disease. Use Orondis Gold in conjunction with good cultural practices to manage disease.
Downy mildew ( <i>Pseudoperonospora humuli</i> )	7.0 – 12**	<b>Foliar Application:</b>  <i>Provided that Orondis Gold was NOT used via soil application, make up to three foliar applications on 7- to 10-day interval, beginning prior to disease development.</i>	Apply by ground, air assisted, or air blast application. Use sufficient volume to provide thorough coverage of the foliage, and increase the volume as plants develop.  The addition of a spreading/penetrating type of adjuvant such as a non-ionic surfactant, organosilicone, or blend at labeled agricultural use rates may enhance disease control.  Use the higher rate when conditions are favorable for disease development, for longer application intervals, or for susceptible varieties.

\*\*7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam

\*\*12.0 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.08 lb mefenoxam

\*\*20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam

\*\*36.0 fl oz is equivalent to 0.08 lb oxathiapiprolin; 0.25 lb mefenoxam

**Resistance Management:**

- Refer to **Section 3.1.**
- 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 Gold (or other oxathiapiprolin-containing product) with foliar applications of another oxathiapiprolin-containing product (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.
- Where 3 or more applications are made, use Orondis Gold (or other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 3 applications, whichever is fewer.

**Integrated Disease Management:**

- Refer to **Section 3.2.**

**USE RESTRICTIONS**

- 1) Refer to **Section 6.1** for additional product use restrictions.
- 2) **Maximum Single Application Rate: DO NOT** exceed maximum rate listed in the table for the application type being used.
- 3) **Maximum Number of Applications per Year:**
  - a) **Soil applications: DO NOT** make more than 1 applications at the maximum rate per year.
  - b) **Foliar/Fruit Application: DO NOT** make more than 3 application at the maximum rate per year.
- 4) **Minimum Application Interval:** 7 days
- 5) **Maximum Annual Rate:** 36.0 fl oz/A/year (equivalent to 0.08 lb ai/A/year oxathiapiprolin and 0.25 lb ai/A/year mefenoxam)
  - a) **DO NOT** apply more than 0.25 lb ai/A/year of soil-applied or 0.09 lb ai/A/year of foliar-applied oxathiapiprolin-containing products.
  - b) **DO NOT** apply more than 0.25 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam-containing products.
- 6) **Pre-harvest Interval (PHI):** 45 days

## Tree Nut Group 14-12

Crops (including all cultivars, varieties, and/or hybrids of these)			
African nut-tree[*]	Coconut[*]	Monkey puzzle nut[*]	
Almond[*]	Coquito nut[*]	Okari nut[*]	
Beechnut[*]	Dika nut[*]	Pachira nut[*]	
Brazil nut[*]	Ginkgo[*]	Peach palm nut[*]	
Brazilian Pine[*]	Guiana Chestnut[*]	Pecan[*]	
Bunya[*]	Hazelnut (Filbert)[*]	Pequi Nut [*]	
Bur Oak[*]	Heartnut[*]	Pili Nut [*]	
Butternut[*]	Hickory nut[*]	Pine nut[*]	
Cajou nut[*]	Japanese horse-chestnut[*]	Pistachio[*]	
Candlenut[*]	Macadamia Nut[*]	Sapucaia nut[*]	
Cashew[*]	Mongongo nut[*]	Tropical almond[*]	
Chestnut[*]	Monkey pot[*]	Walnut, black[*]	
Chinquapin[*]		Walnut, English[*]	
		Yellowhorn[*]	
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Phytophthora root and crown rot ( <i>Phytophthora</i> spp.)	20.0 – 55.0**	<p><b>Resets or New Plantings:</b> Make first soil application at planting and up to one additional application 2-6 months later, coinciding with a root growth flush.</p> <p><b>Established Plantings:</b> Make up to two soil applications at a 2- to 6-month interval, coinciding with root growth flush.</p>	<p>[(<i>*Not for use in California</i>)]</p> <p>Apply as a drench or soil spray under the canopy around the base of the tree to the zone of maximum root density, or through irrigation water (micro-sprinkler, drip, flood).</p> <p>For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the application method does not move the product to the root zone, and rain is not imminent, then follow with irrigation.</p>
**20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam			
**55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mefenoxam			
<b>Resistance Management:</b>			
<ul style="list-style-type: none"> <li>Refer to <b>Section 3.1</b>.</li> </ul>			
<b>Integrated Disease Management:</b>			
<ul style="list-style-type: none"> <li>Refer to <b>Section 3.2</b>.</li> </ul>			
USE RESTRICTIONS			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate:</b> <b>DO NOT</b> exceed the maximum rate listed in the table.</li> <li><b>Maximum Number of Applications per Year:</b> <b>DO NOT</b> make more than 2 applications at the maximum rate listed in the table per year.</li> <li><b>Minimum Application Interval:</b> 30 days</li> <li><b>Maximum Annual Rate:</b> 110.0 fl oz/A/year (equivalent to 0.25 lb ai/A/year oxathiapiprolin and 0.76 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.25 lb ai/A/year of oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 6.0 lb ai/A/year of mefenoxam-containing products.</li> </ol> </li> <li><b>DO NOT</b> use in nursery production of transplanted crops.</li> </ol>			



7) **Pre-harvest Interval (PHI):** 30 days

## Tropical and Subtropical – Avocados, Black Sapote, Canistel, Mango, Papaya, and Star Apple ONLY

Crops (including all cultivars, varieties, and/or hybrids of these)			
Avocado Black Sapote Canistel		Mango Papaya Star Apple	
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Phytophthora root and crown rot ( <i>Phytophthora</i> spp.)	20.0 – 55.0**	<p><b>Resets or New Plantings:</b> Make first soil application at planting and up to one additional application 3 months later, coinciding with a root growth flush.</p> <p><b>Established Plantings:</b> Make up to two soil applications on a 3 month interval, coinciding with root growth flush.</p>	<p>Apply as a drench or soil spray under the canopy around the base of the tree to the zone of maximum root density, or through irrigation water (micro-sprinkler, drip, flood).</p> <p>For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the application method does not move the product to the root zone, and rain is not imminent, then follow with irrigation.</p>
<p>**20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mfenoxam  **55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mfenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> <li>Do not follow soil applications of Orondis Gold (or other oxathiapiprolin-containing product) with foliar applications of another oxathiapiprolin-containing product (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control</li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>			
USE RESTRICTIONS			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate:</b> <b>DO NOT</b> exceed maximum rate listed in the table.</li> <li><b>Maximum Number of Applications Per Year:</b> <b>DO NOT</b> make more than 2 application at the maximum rate listed in the table per year.</li> <li><b>Minimum Application Interval:</b> 90 days</li> <li><b>Maximum Annual Rate:</b> 110.0 fl oz/A/year (equivalent to 0.25 lb ai/A/year of soil-applied oxathiapiprolin and 0.76 lb ai/A/year mfenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.25 lb ai/A/year of soil-applied oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 6.0 lb ai/A/year of mfenoxam-containing products for avocado, or 3.0 lb ai/A/year of mfenoxam for other crops listed.</li> </ol> </li> <li><b>DO NOT</b> use in nursery production of transplanted crops.</li> <li><b>Pre-harvest Interval (PHI):</b> 30 days</li> </ol>			

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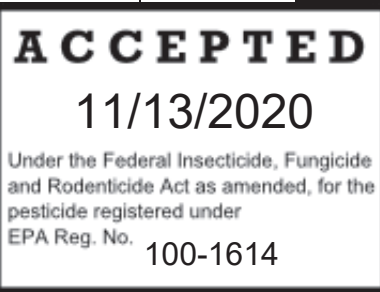
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<b>OXATHIPIPROLIN</b>	<b>GROUP</b>	<b>49</b>	<b>FUNGICIDE</b>
<b>MEFENOXAM</b>	<b>GROUP</b>	<b>4</b>	<b>FUNGICIDE</b>

**Orondis® Gold****Fungicide**

Active Ingredient:

Oxathiapiprolin<sup>1</sup>: ..... 3.29%Mefenoxam<sup>2</sup>: ..... 9.89%

Other Ingredients: ..... 86.82%

Total: ..... 100.00%

<sup>1</sup>CAS No. 1003318-67-9<sup>2</sup>CAS Nos. 70630-17-0 and 69516-34-3

Orondis® Gold is formulated as a dispersible concentrate (DC) and contains 0.29 lb of oxathiapiprolin and 0.88lb of mefenoxam per gallon.

**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).

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>NOTE TO PHYSICIAN:</b>	
Probable mucosal damage may contraindicate the use of gastric lavage.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

**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**

See additional precautionary statements and directions for use [on label] [inside booklet].

EPA Reg. No. 100-1614

EPA Est.

\_\_ gallon

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### **7.8 Potato and Other Tuberous and Corm Vegetables, Subgroup 1C**

### **7.9 Tree Nut Group 14-12**

### **7.10 Tropical and Subtropical – Avocados, Black Sapote, Canistel, Mango, Papaya, and Star Apple ONLY**

### **7.11 Tobacco**

## **8.0 STORAGE AND DISPOSAL**

## **9.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

## **10.0 APPENDIX [Optional Text]**

- 10.1 Orondis Gold Rate Conversion Chart
- 10.2 Orondis Gold Use Summary Table

## 1.0 FIRST AID

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>NOTE TO PHYSICIAN:</b>	
Probable mucosal damage may contraindicate the use of gastric lavage.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOTLINE NUMBER</b>	
For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call <b>1-800-888-8372</b>	

## PRECAUTIONARY STATEMENTS

### 2.0 PRECAUTIONARY STATEMENTS

#### 2.1 Hazards to Humans and Domestic Animals

#### **DANGER / PELIGRO**

Corrosive to the eyes. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if swallowed. 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)
- Long-sleeved shirt and long pants
- Shoes and socks
- Chemical-resistant gloves made of polyvinyl chloride  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, or butyl rubber  $\geq$  14 mils

## 2.3 User Safety Requirements

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

## 2.4 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.

## 2.5 User Safety Recommendations

### User Safety Recommendations

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove and wash contaminated clothing before reuse.
- 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.

## 2.6 Environmental Hazards

This product is toxic to aquatic invertebrates. 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

### 2.6.1 Groundwater Advisory

Mefenoxam has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

### 2.6.2 Surface Water Advisory

This product may contaminate water through spray drift due to wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied



and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

## 2.7 Physical or Chemical Hazards

Do not mix or allow in contact with oxidizing agent and water. Hazardous chemical reaction may occur.

## DIRECTIONS FOR USE

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

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.

Orondis Gold 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.

**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 48 hours.**

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area immediately if there will be no contact with anything that has been treated.

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 and socks
- Chemical-resistant gloves made of polyvinyl chloride  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, or butyl rubber  $\geq$  14 mils

## 3.0 PRODUCT INFORMATION

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

- Orondis Gold contains oxathiapiprolin and mefenoxam and is for the control or suppression of the diseases listed on this label.
- Orondis Gold is active against Oomycete diseases listed on this label and has preventive, residual, eradivative and anti-sporulant activity.
- Orondis Gold is locally systemic, translaminar, and moves systemically in the xylem.
- See **Section 7.0** for specific crop/disease directions.

### MODE OF ACTION

Orondis Gold contains two active ingredients: oxathiapiprolin, which inhibits an oxysterol-binding protein (OSBP) homologue, and mefenoxam, which inhibits RNA polymerase I.

### 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 Gold 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 Resistance Management

<b>OXATHIPIPROLIN</b>	<b>GROUP</b>	<b>49</b>	<b>FUNGICIDE</b>
<b>MEFENOXAM</b>	<b>GROUP</b>	<b>4</b>	<b>FUNGICIDE</b>

For resistance management, please note that Orondis Gold contains both a Group 49 [oxathiapiprolin] and Group 4 [mefenoxam] fungicide. Any fungal population may contain individuals naturally resistant to Orondis Gold and other Group 49 or Group 4 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 both general and product-specific should be followed.

General Strategies to delay resistance:

- Rotate the use of Orondis Gold or other Groups 49 and 4 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as 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 Integrated Pest Management (IPM) recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report suspected resistance.

#### Product-Specific Strategies to delay resistance:

- Orondis Gold applications are to be made preventively.
- Do not tank-mix Orondis Gold 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 Gold (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 Gold (or any other FRAC 49-containing product).
- Do not follow soil applications of Orondis Gold (or any other FRAC 49-containing product) with foliar applications of Orondis Opti (EPA Reg. No. 100-1591) or Orondis Ultra (EPA Reg. No. 100-1612) (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 apply more than 4 sprays during one crop cycle.
- Do not apply more than 6 applications of Orondis Gold (or any other FRAC 49-containing product) per year on the same acreage.
- Do not use Orondis Gold (or any other FRAC-49 containing product) in nursery production of transplanted crops.
- For guidance on a particular crop or disease control situation, consult your state extension specialist for official state recommendations.

## 3.2 Integrated Pest Management (IPM)

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

## 4.0 APPLICATION DIRECTIONS

### 4.1 Methods of Application

- For suppression or control of soil-borne diseases, as specified in this label, Orondis Gold 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 Gold will suppress or control certain seedling root rot and crown diseases that limit crop stand establishment.
- For soil application, apply Orondis Gold using chemigation, transplant water application (water wheel or continuous stream transplanters), surface band or directed application, or in-furrow application using the rates in **Table 1**. See table and **Section 4.5** for chemigation 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.
- Use Orondis Gold as a foliar application only where specified in this label.

#### 4.1.1 Soil Applications (In-Furrow or Banded)

- **In-furrow application:**
  - Apply Orondis Gold as an in-furrow spray in 5-15 gallons water per acre at planting.
  - Mount the spray nozzle so the spray is directed into the furrow just before the seed are covered.

**Table 1. Soil application rates for Orondis Gold /1,000 feet of row, based on plant row spacing**

Orondis Gold Conversion Chart for Drip (Trickle) Chemigation, Continuous Transplant Water, and Direct/Banded/In-Furrow Application							
Corresponding field rate (fl oz/A)	Rate in fl oz product/1,000 row ft based on planted row spacing of:						
	30"	34"	36"	48"	60"	72"	84"
7.0	0.4	0.45	0.48	0.6	0.8	0.96	1.1
14.0	0.8	0.9	0.96	1.28	1.6	1.9	2.2

20.0	1.14	1.3	1.37	1.83	2.3	2.7	3.2
28.0	1.6	1.8	1.9	2.57	3.2	3.85	4.5

### Transplant Water Application

- Transplants should be adequately watered before transplanting. Ensure transplant water volume is sufficient to thoroughly wet the root zone.
- See **Table 1** 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 of product per plant.

Example:

$$\frac{28.0 \text{ fl oz product}}{\text{acre}} \times \frac{\text{acre}}{4,356 \text{ plants}} = \frac{0.0064 \text{ fl oz product}}{\text{plant}}$$

### Surface Band or Directed Application

- Apply in a 6- to 12-inch band. See **Table 1** for rates.
- Follow application with cultivation or irrigation (0.25 – 0.5 inch) to move Orondis Gold to the target disease zone.

## 4.2 Application Equipment

Orondis Gold can be applied using ground equipment, pressurized and hand-held sprayers, and chemigation equipment, except as otherwise directed. Maintain agitation during mixing and application to ensure 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.

## 4.3 Application Volume and Spray Coverage

See **Section 4.1** for general information and **Section 7.0** for directions on specific crops.

## 4.4 Mixing Directions

### 4.4.1 Orondis Gold Alone

1. Fill clean spray tank 1/2 - 2/3 full of water
2. While agitating, add the required amount of Orondis Gold, 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

- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations and directions for use on all product labels involved in tank mixing. User must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- Tank mixes of Orondis Gold with other pesticides, fertilizers, or any other additives not specifically labelled for use with Orondis Gold may result in tank mix incompatibility or unsatisfactory performance. In such cases, always check tank mix compatibility by conducting a jar test according to guidance in **Section 4.4.3** before actual tank mixing.

#### 4.4.3 Tank-Mix Compatibility

- Conduct a jar test using a 1 pt to 1 qt container with lid by adding water or other intended carrier such as liquid fertilizer to the jar.
- Next, add the appropriate amount of pesticide(s) or tank-mix partner(s) in their relative proportions based on specified label rates. Add tank-mix components separately in the order described in the tank-mixing section, **Section 4.4.4**. After each addition, shake or stir gently to thoroughly mix.
- After all ingredients have been added, put the lid on the jar, tighten and invert the jar 10 times to mix.
- After mixing, let the mixture stand 15–30 minutes and then examine for signs of incompatibility such as obvious separation, large flakes, precipitates, gels or heavy oily film on the jar.
- If the mixture remains mixed or can be remixed readily, it is physically compatible and can be used.
- If the mixture is incompatible, repeat the test using a compatibility agent at the specified label rate. Or, if applicable, slurry dry formulations in water before adding to the jar. If incompatibility is still observed after following these procedures, do not use the mixture.
- After compatibility testing is complete, dispose of any pesticide wastes in accordance with the storage and disposal section, **Section 8.0**, of this label.

#### 4.4.4 Orondis Gold In Tank Mixtures

- Always follow the tank mix instructions of the product label that are most restrictive.
- Apply at least the minimum labeled rate of each pesticide 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 suspensions (CS)
  7. **Dispersible concentrates (DC) (Orondis Gold)**

8. Suspo-emulsions (SE)
9. Oil dispersions (OD)
10. Emulsion in water (EW)
11. Emulsifiable concentrates (EC)
12. Water-soluble concentrates (SL)
13. Adjuvants, surfactants, oils
14. Soluble fertilizers
15. Drift retardants

## 4.5 Application through Irrigation Systems (Chemigation)

### 4.5.1 Application Instructions for Irrigation Systems

- Use only on crops where chemigation is specified on this label.
- Apply this product only through center-pivot, solid-set, hand-move, moving-wheel irrigation systems or drip (trickle) or strip tubing irrigation systems. Do not apply this product through any other type of irrigation system.
- [Do not inject Orondis Gold at full strength or deterioration of valves and seals may occur. **Use a dilution ratio of at least 15 parts water to 1 part Orondis Gold in the mix tank.** Orondis Gold can affect many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton®, nitrile (Buna-N), Neoprene, or PVC seals.]
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- Apply Orondis Gold use rates in 0.25-0.5 inch per acre. Excessive water may reduce efficacy.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other 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.

### Center-Pivot Irrigation Equipment

**Restrictions:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Orondis Gold through center-pivot systems because of non-uniform application.

### Irrigation Instructions:

- Determine the size of the area to be treated.
- Determine the time required to apply 0.25-0.5 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying Orondis Gold 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 Gold required to treat the area covered by the irrigation system.
- Add the required amount of Orondis Gold and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the Orondis Gold 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 Gold solution has cleared the sprinkler head.

### **Solid-Set, Hand-Move, and Moving-Wheel Irrigation Equipment**

- 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 Gold through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Orondis Gold required to treat the area covered by the irrigation system.
- Add the required amount of Orondis Gold 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 Gold solution has cleared the last sprinkler head.

### **Drip (Trickle) Irrigation Instructions**

- Orondis Gold must be applied in a manner that ensures the product is in the root zone.
- Orondis Gold must be in the root zone to provide effective control of target pests.
- Orondis Gold 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 Gold remain in the root zone.
- A pesticide tank is recommended for the application of Orondis Gold in drip chemigation systems.
- 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. 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.
- In most situations, this product should be applied during the middle 1/3 of the irrigation cycle.
- 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.



### 4.5.2 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 toward 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.

### 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, 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

## 4.6 Sprayer Cleanout

- 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.

## 5.0 ROTATIONAL CROP RESTRICTIONS

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

Crop, Crop Group, or Crop Subgroup	Plant-back Interval
Asparagus Avocados Bushberry, Subgroup 13-07B, except lowbush blueberry Brassica, Head and Stem (Subgroup 5A) Bulb Vegetables (Crop Group 3-07) Caneberry Subgroup 13-07A Cucurbit Vegetables (Crop Group 9) Fruiting Vegetables (Crop Group 8) Ginseng Hops Herbs and Spices (Crop Group 19) Leafy Greens ( Subgroup 4A) and Swiss Chard Peas, Edible-Podded Peas, Succulent Shelled Strawberries Sunflower Tree Nuts, Crop Group 14-12 Tobacco Tuberous and Corm Vegetables (Subgroup 1C)	0 days
Cereals (Crop Groups 15 and 16) Grass animal feeds (Crop Group 17)	30 days
Legume Vegetables Peanuts	180 days
Non-grass Animal feed (Crop Group 18) All other crops not listed	365 days

## 6.0 RESTRICTIONS AND PRECAUTIONS

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

### 6.1 Use Restrictions

- **DO NOT** use Orondis Gold in greenhouse production.

- Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same season: Do not apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

## 6.2 Spray Drift Management

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

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

### 6.2.1 Ground Boom Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

## 6.3 Drift Reduction Advisory Information

### 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.

### 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 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.

### 6.3.4 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.

### 6.3.5 Temperature and Humidity

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

### 6.3.6 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.

### 6.3.7 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.

## 7.0 CROP USE DIRECTIONS

### 7.1 Asparagus

Crop			
Asparagus [(Not for use in California)]			
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Phytophthora root rot ( <i>Phytophthora</i> spp.)	13.7-73.0**	<p><b>New plantings:</b> Use as a crown soak prior to planting.</p>	<p>Use 10 gallons of solution, or the volume required to fully submerge 100 crowns.</p> <p>To determine the amount of product needed to treat 100 crowns, first determine the number of plants per acre using typical plant spacing.</p> <p>Then use the following formula:  <math>(100 \div \text{number plants per acre}) \times \text{use rate} = \text{product needed to treat 100 crowns in 10 gallons of solution.}</math></p> <p>Make a crown soak solution in a large enough container to ensure that the crowns are fully submerged.</p> <p>Place crowns in fungicide solution and soak for a minimum of 10 minutes.</p>
		<p><b>Established plantings:</b> Make first application to established asparagus beds at least 14 days prior to harvest (first cutting).</p> <p>Make second application on the day before the first cutting.</p>	<p>Apply as a soil-directed banded spray in a minimum of 20 gal/A of water.</p> <p>The application is to be made at the per acre rate concentrated in a band.</p> <p>Apply ¼ - ½ inch of water after application, either by overhead sprinkler irrigation or garden hose drench on the row.</p> <p>Orondis Gold may be applied by drip irrigation using the following directions:</p> <ul style="list-style-type: none"> <li>• Apply 1/2 acre-inch of water alone.</li> <li>• Then apply the first 1/4 - 1/3 of the irrigation water with Orondis Gold.</li> </ul>

			<ul style="list-style-type: none"> <li>Finally, apply the final 2/3 – 3/4 of the irrigation water without Orondis Gold.</li> </ul> <p>Refer to <b>Section 4.5.1</b> for additional drip irrigation instructions.</p>
<p>**13.7 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.09 lb mefenoxam  **73.0 fl oz is equivalent to 0.17 lb oxathiapiprolin; 0.5 lb mefenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>			
<b>USE RESTRICTIONS</b>			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate:</b> <b>DO NOT</b> exceed maximum rate listed in the table.</li> <li><b>Maximum Number of Applications:</b> <b>DO NOT</b> make more than two Orondis Gold applications per year.</li> <li><b>Minimum Application Interval:</b> 14 days</li> <li><b>Maximum Annual Application Rate:</b> 146.0 fl oz/A/year (equivalent to 0.33 lb ai/A/year oxathiapiprolin and 1.0 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.5 lb ai/A/year of oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 1.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl- containing products.</li> </ol> </li> <li><b>Pre-harvest Interval (PHI):</b> 1 day</li> </ol>			

## 7.2 Berries

### 7.2.1 Bushberry Subgroup 13-07B, except lowbush blueberry

<b>Crops (including all cultivars, varieties, and/or hybrids of these)</b>			
Aronia berry[*]		Gooseberry[*]	
Blueberry, highbush[*]		Honeysuckle, edible[*]	
Buffalo currant[*]		Huckleberry[*]	
Chilean Guava[*]		Jostaberry[*]	
Cranberry, highbush[*]		Juneberry (Saskatoon berry)[*]	
Currant, Black[*]		Lingonberry[*]	
Currant, Red[*]		Native currant[*]	
Elderberry[*]		Salal[*]	
European barberry[*]		Sea buckthorn[*]	
<b>Target Disease</b>	<b>Rate (fl oz/A)</b>	<b>Application Timing</b>	<b>Use Directions</b>
Phytophthora root rot ( <i>Phytophthora</i> spp.)	20.0 – 55.0**	<p><b>Soil Application:</b></p> <p><b>New Plantings:</b> Make first application at planting, and a second at least 30 days later, and coinciding with a period favorable for root rot development.</p> <p><b>Established Plantings:</b> Make first application before plants start to grow in the</p>	<p>[(Not for use in California)]</p> <p>Apply as a drench, or soil directed spray, or through irrigation water (micro-sprinkler, drip or flood).</p> <p>For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the application method does not move the product to the root zone, and rain is not</p>

		spring, and a second at least 30 days later, and coinciding with a period favorable for root rot development.	<p>imminent, then follow with irrigation.</p> <p>See <b>Section 4.1.2</b> for at-planting, or transplant water instructions. See <b>Section 4.5</b> for drip irrigation instructions.</p> <p>[Use the higher rate in fields with a history of Phytophthora disease.]</p> <p>[Orondis Gold will not revitalize plants showing moderate to severe root rot symptoms.]</p> <p>Use Orondis Gold in conjunction with good cultural practices to manage disease.</p>
<p>**20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam  **55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mefenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>• Refer to <b>Section 3.1</b>.</li> <li>• Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.</li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>• Refer to <b>Section 3.2</b>.</li> </ul>			
<b>USE RESTRICTIONS</b>			
<ol style="list-style-type: none"> <li>1) Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li>2) <b>Maximum Single Application Rate: DO NOT</b> exceed maximum rate listed in the table.</li> <li>3) <b>Maximum Number of Applications: DO NOT</b> make more than two Orondis Gold applications per year.</li> <li>4) <b>Minimum Application Interval:</b> 30 days</li> <li>5) <b>Maximum Annual Rate:</b> 110.0 fl oz/A/year (equivalent to 0.25 lb ai/A/year oxathiapiprolin and 0.76 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li>a) <b>DO NOT</b> apply more than 0.5 lb ai/A/year of soil-applied oxathiapiprolin-containing products.</li> <li>b) <b>DO NOT</b> apply more than 3.6 lb ai/A year of soil-applied mefenoxam-containing products.</li> </ol> </li> <li>6) <b>DO NOT</b> use in nursery production of transplanted crops.</li> <li>7) <b>Pre-harvest Interval (PHI):</b> 1 day</li> </ol>			

## 7.2.2 Caneberry Subgroup 13-07A

Crops (including all cultivars, varieties, and/or hybrids of these)			
Blackberry[*]	Loganberry[*]	Raspberry, red and black[*]	Wild raspberry[*]
Target Disease	Rate (fl oz/acre)	Application Timing	Use Directions
Root Rot ( <i>Phytophthora</i> Spp.)	13.7 - 110.0**	<p><b>New Plantings:</b> Make one application at the time of planting and a second application during a period favorable for root growth at least 7 days after the first application</p> <p><b>Established Plantings:</b> Make first application before plants start to grow in the spring.</p> <p>Make a second application during a period favorable for root growth and at least 7 days after the first application.</p>	<p>[(Not for use in California)]</p> <p>Apply as a banded, soil-directed spray in a minimum of 20 gal/A of water, or via drip or micro-sprinkler irrigation. For banded application, direct the spray along each side of the crop row and direct the application to the soil, near and under the lower leaves. See <b>Section 4.1.1.</b></p> <p>[For enhanced control of <i>Phytophthora</i> add a mefenoxam-containing product to the spray mixture. Do not exceed a total of 1.8 lb ai soil applied mefenoxam per application or per year. ]</p> <p>Orondis Gold will not revitalize plants showing moderate to severe root rot symptoms.</p> <p>Use Orondis Gold in conjunction with good cultural practices to minimize disease.</p>
<p>**13.7 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.09 lb mefenoxam  **110.0 fl oz is equivalent to 0.25 lb oxathiapiprolin; 0.76 lb mefenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>			
USE RESTRICTIONS			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate:</b> <b>DO NOT</b> exceed maximum rate listed in the table.</li> <li><b>Maximum Number of Applications:</b> <b>DO NOT</b> make more than two Orondis Gold applications per year.</li> <li><b>Minimum Application Interval:</b> 7 days</li> <li><b>Maximum Annual Application Rate:</b> 220.0 fl oz/A/year (equivalent to 0.5 lb ai/A/year oxathiapiprolin and 1.51 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.5 lb ai/A/year of oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 1.8 lb ai/A/year of soil-applied mefenoxam-containing products.</li> </ol> </li> <li><b>Pre-harvest Interval (PHI):</b> 45 days</li> </ol>			



## 7.2.3 Strawberry

Crops (including all cultivars, varieties, and/or hybrids of these)			
Strawberry			
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Crown rot ( <i>Phytophthora cactorum</i> )  Red stele root rot ( <i>Phytophthora fragariae</i> )	20.0 – 62.0**	<b>Soil Application:</b> Make up to two applications by drip application.  <b>New Plantings:</b> Make the first application soon after planting when overhead watering for plant establishment has been completed, and a second application 30 days before the beginning of harvest or at fruit set.  <b>Established Plantings:</b> Make the first application in the spring before first bloom, and the second after harvest.	See <b>Section 4.5</b> for drip irrigation instructions.  [Use the higher rate in fields with a history of <i>Phytophthora</i> disease.]
Leather rot ( <i>Phytophthora cactorum</i> )	7.0 – 13.9**	<b>Foliar Application:</b>  <i>Provided that Orondis Gold was NOT used via soil application,</i> Make up to two foliar/soil-directed applications, the first at fruit set and, if required, a second during harvest.	Apply by ground application or overhead chemigation.  [Use the higher rate in fields with a history of <i>Phytophthora</i> disease.]
<p>**7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam  **13.9 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.10 lb mefenoxam  **20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam  **62.0 fl oz is equivalent to 0.14 lb oxathiapiprolin; 0.43 lb mefenoxam</p>			
<b>Resistance Management:</b> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1</b>.</li> <li>Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.</li> <li><b>DO NOT</b> follow soil applications of Orondis Gold (or any other FRAC 49-containing product) with foliar/soil-directed applications of Orondis Gold (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.</li> </ul>			
<b>Integrated Disease Management:</b> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2</b>.</li> </ul>			
USE RESTRICTIONS			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed the maximum rate listed in the table for the application type being used.</li> <li><b>Maximum Number of Applications per Year:</b> <ol style="list-style-type: none"> <li><b>Soil applications: DO NOT</b> make more than 2 applications at the maximum rate per year.</li> <li><b>Foliar/Fruit Application: DO NOT</b> make more than 2 application at the maximum rate per year.</li> </ol> </li> <li><b>Minimum Application Interval:</b> 30 days</li> </ol>			

- 5) **Maximum Annual Rate:** 124.0 fl oz/A/year (equivalent to 0.28 lb ai/A/year oxathiapiprolin and 0.85 lb ai/A/year mfenoxam)
- DO NOT** apply more than 0.29 lb ai/A/year of soil-applied or 0.06 lb ai/A/year of foliar/soil-directed oxathiapiprolin-containing products.
  - DO NOT** apply more than 1.5 lb ai/A/year of soil-applied or 0.19 lb ai/A/year of foliar/soil-directed mfenoxam-containing products.
- 6) **DO NOT** use in nursery production.
- 7) **Pre-harvest Interval (PHI):**
- 28 days (soil applications only)
  - 0 days (foliar/soil-directed applications only)

### 7.3 Cucurbit Vegetables Crop Group 9

Crops (including all cultivars, varieties, and/or hybrids of these)			
Chayote (fruit)		<b>Muskmelon</b>	<b>Muskmelon (cont'd)</b>
Chinese waxgourd (Chinese preserving melon)		Cantaloupe	Pineapple melon
Citron melon		Casaba	Santa Claus melon
Cucumber		Crenshaw melon	Snake melon
Gherkin		Golden Pershaw melon	Pumpkin
Gourd, edible		Honeydew melon	Squash, summer
<b>Momordica spp.</b>		Honey balls	Squash, winter
Balsam apple		Mango melon	Watermelon
Balsam pear		Persian melon	
Bittermelon			
Chinese cucumber			
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Damping off ( <i>Pythium</i> spp.) Phytophthora blight and crown rot ( <i>Phytophthora capsici</i> )	20.0-55.0**	<b>At-Planting Soil Application by any of the following methods:</b> <ul style="list-style-type: none"> <li>▪ In-furrow</li> <li>▪ Banded surface spray – Apply following transplanting or during seeding in a 6- to 12-inch band.</li> <li>▪ Drip irrigation – If using drip irrigation on direct-seeded crops, delay application until after emergence.</li> </ul>	See <b>Section 4.1.1</b> for directions for at-planting applications in-furrow or as a banded soil surface spray.  See <b>Section 4.5.1</b> for drip irrigation instructions.  [For enhanced control of <i>Pythium</i> spp., add a mfenoxam-containing product to the spray mixture. DO NOT exceed 1.0 lb ai soil applied mfenoxam per application or per year.]  [If disease pressure is high, use the highest specified rate.]  [If disease pressure is high, use the shortest interval.]  [If disease pressure is high, use the shortest interval and highest rate.]
Downy mildew ( <i>Peronospora cubensis</i> )	7.0-12.0**	<b>Foliar Application:</b> <i>Provided that Orondis Gold was NOT used at planting</i> , make up to two foliar applications at 20-	<b>Broadcast or Banded Foliar Spray:</b> For ground application, apply in at least 15 gal/A to ensure

Phytophthora blight and crown rot ( <i>Phytophthora capsici</i> )		to 30-day interval. During the period between applications of Orondis Gold, maintain disease management with sprays of effective fungicide products containing FRAC codes other than 49 and 4.	thorough coverage of the foliage and developing fruit.  [If disease pressure is high, use the highest specified rate.]  [If disease pressure is high, use the shortest interval.]  [If disease pressure is high, use the shortest interval and highest rate.]
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\*\*7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam

\*\*12.0 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.08 lb mefenoxam

\*\*20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam

\*\*55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mefenoxam

#### Resistance Management:

- Refer to **Section 3.1**.
- Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.
- Where 3 or more applications are made, use Orondis Gold (or other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer.

#### Integrated Disease Management:

- Refer to **Section 3.2**.

#### Precautions:

- At-planting and post-planting applications may cause some yellowing of cucurbit leaves.
- Avoid application to cucurbits in transplant water since there is a risk of plant injury.

### USE RESTRICTIONS

- 1) Refer to **Section 6.1** for additional product use restrictions.
- 2) **Maximum Single Application Rate:** **DO NOT** exceed maximum rate listed in the table for the application type being used.
- 3) **Maximum Number of Applications per Year:**
  - a) **Soil applications:** **DO NOT** make more than 1 application per year.
  - b) **Foliar/Fruit Application:** **DO NOT** make more than 4 applications at the maximum rate per year.
- 4) **Minimum Application Interval:** 20 days
- 5) **Maximum Annual Rate:** 55.0 fl oz/A/year (equivalent to 0.12 lb ai/A/year oxathiapiprolin and 0.38 lb ai/A/year mefenoxam)
  - a) **DO NOT** apply more than 0.5 lb ai/A/year of soil-applied or 0.12 lb ai/A/year of foliar-applied oxathiapiprolin-containing products.
  - b) **DO NOT** apply more than 1.0 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam-containing products.
- 6) **DO NOT** follow soil applications of Orondis Gold with foliar applications of Orondis Gold (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.
- 7) On multiple plantings in the same year, **DO NOT** exceed 6 applications per acre per year, ensuring that the annual maximum rates are not exceeded.
- 8) **DO NOT** use Orondis Gold in nursery production of transplants.
- 9) **Pre-harvest Interval (PHI):** 5 days

## 7.4 Fruiting Vegetables

Crops (including all cultivars and/or varieties of these)			
Eggplant		Pepper, bell	Tomatillo
Groundcherry		Pepper, non-bell	Tomato
Pepino			
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Damping off ( <i>Pythium</i> spp.) Phytophthora blight and crown rot ( <i>Phytophthora capsici</i> )	20.0-55.0**	<p><b>At-Planting Soil Application by any of the following methods:</b></p> <ul style="list-style-type: none"> <li>▪ In-furrow</li> <li>▪ Transplant water</li> <li>▪ Banded surface spray – Apply following transplanting or during seeding in a 6- to 12-inch band.</li> <li>▪ Drip irrigation – If using drip on direct-seeded crops, delay application until after emergence.</li> </ul>	<p>See <b>Section 4.1.1</b> for directions for at-planting applications in-furrow, or as a banded soil surface spray, or in transplant water.</p> <p>See <b>Section 4.5.1</b> for drip irrigation instructions.</p> <p>[For enhanced control of <i>Pythium</i> spp., add a mefenoxam-containing product to the spray mixture. DO NOT exceed 0.5 lb ai soil applied mefenoxam per application and 1.5 lb ai soil applied mefenoxam per year.]</p> <p>[If disease pressure is high, use the highest specified rate.]</p> <p>[If disease pressure is high, use the shortest interval.]</p> <p>[If disease pressure is high, use the shortest interval and highest rate.]</p>
Damping off ( <i>Pythium</i> spp.) Late blight ( <i>Phytophthora infestans</i> ) Phytophthora blight and crown rot ( <i>Phytophthora capsici</i> )	7.0-12.0**	<p><b>Post-Planting Soil-Directed Application</b> (<i>provided that Orondis Gold was NOT used at planting</i>):</p> <ul style="list-style-type: none"> <li>• <b>All fruiting vegetables listed except tomato:</b> Make up to two post-directed applications at 30-day interval after transplanting.</li> <li>• <b>Tomato:</b> Make first application 4-6 weeks after planting and, if needed, a second application up to 4 weeks before harvest, but before the last irrigation.</li> </ul> <p>During the period between applications of Orondis Gold, maintain disease management with sprays of effective fungicide products containing FRAC codes other than 49 and 4.</p>	<p><b>Banded Spray:</b> Direct the spray to the base of the plants and cover 6-8 inches of the soil on either side of the plants. Incorporate mechanically or sprinkler-irrigate to move the product into the root zone.</p> <p><b>Shank Application:</b> Apply in liquid fertilizer, shanked in to either side of the plant. Position injector just below the root system to allow developing roots to expand and come in contact with Orondis Gold.</p> <p>[If disease pressure is high, use the highest specified rate.]</p> <p>[If disease pressure is high, use the shortest interval.]</p> <p>[If disease pressure is high, use the shortest interval and highest rate.]</p>

<p>**7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam</p> <p>**12.0 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.08 lb mefenoxam</p> <p>**20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam</p> <p>**55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mefenoxam</p>
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1</b>.</li> <li>Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.</li> <li>Where 3 or more applications are made, use Orondis Gold (or other FRAC 49-containing product) in no more than 33% of the applications or a maximum of 4 applications, whichever is fewer.</li> </ul>
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2</b>.</li> </ul>
<b>USE RESTRICTIONS</b>
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed maximum rate listed in the table for the application type being used.</li> <li><b>Maximum Number of Applications per Year:</b> <ol style="list-style-type: none"> <li><b>Soil applications: DO NOT</b> make more than 1 application per year.</li> <li><b>Foliar/Fruit Application: DO NOT</b> make more than 4 application at the maximum rate per year.</li> </ol> </li> <li><b>Minimum Application Interval:</b> <ol style="list-style-type: none"> <li><b>All fruiting vegetables listed except tomato:</b> 30 days</li> <li><b>Tomato:</b> 28 days</li> </ol> </li> <li><b>Maximum Annual Rate:</b> 55.0 fl oz/A/year (equivalent to 0.12 lb ai/A/year oxathiapiprolin and 0.38 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.5 lb ai/A/year of soil-applied or 0.12 lb ai/A/year of foliar-applied oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 1.5 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam-containing products.</li> </ol> </li> <li><b>DO NOT</b> follow soil applications of Orondis Gold with foliar applications of Orondis Gold (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.</li> <li>On multiple plantings in the same year, <b>DO NOT</b> exceed 6 applications per acre per year, ensuring that the annual maximum rates are not exceeded.</li> <li><b>DO NOT</b> use Orondis Gold in nursery production of transplants.</li> <li><b>Pre-harvest Interval (PHI):</b> 7 days</li> </ol>

## 7.5 Ginseng

<b>Crops (including all cultivars and/or varieties)</b>			
Ginseng			
<b>Target Disease</b>	<b>Rate (fl oz/A)</b>	<b>Application Timing</b>	<b>Use Directions</b>
Phytophthora root rot ( <i>Phytophthora cactorum</i> )	28.0-48.0**	<p>Make a soil drench application as soon as plants begin growing in the spring.</p> <p>Ideally, time the application prior to a forecast precipitation.</p>	<p>Make application uniformly to the soil surface. Drench in a sufficient volume (at least 100-200 gal/A) to move the product into the root zone. Use a higher drench volume when making applications to beds with a straw mulch.</p> <p>In the absence of precipitation within 24 hours of application, and if overhead irrigation is available, provide 0.25-0.5 inch of water.</p>

			<p>[Use the higher labeled rates in areas with a history of Phytophthora.]</p> <p>Follow the soil application of Orondis Gold with a foliar program of other products effective against Phytophthora root rot.</p>
<p>**28.0 fl oz is equivalent to 0.06 lb oxathiapiprolin; 0.19 lb mefenoxam  **48.0 fl oz is equivalent to 0.11 lb oxathiapiprolin; 0.33 lb mefenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>			
<b>USE RESTRICTIONS</b>			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed maximum rate listed in the table.</li> <li><b>Maximum Number of Applications per Year: DO NOT</b> make more than 1 application per year.</li> <li><b>Maximum Annual Rate:</b> 48.0 fl oz/A/year (equivalent to 0.11 lb ai/A/year oxathiapiprolin and 0.33 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.5 lb ai/A/year of oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 0.38 lb ai/A/year of mefenoxam-containing products.</li> </ol> </li> <li><b>DO NOT</b> follow soil applications of Orondis Gold with foliar applications of Orondis Gold (or any other FRAC 49-containing product).</li> <li><b>Pre-harvest Interval (PHI):</b> 14 days</li> </ol>			

## 7.6 Hops

<b>Crops (including all cultivars, varieties, and/or hybrids)</b>			
Hops [(Not for use in California)]			
<b>Target Disease</b>	<b>Rate (fl oz/A)</b>	<b>Application Timing</b>	<b>Use Directions</b>
Downy mildew (soil/crown phase) ( <i>Pseudoperonospora humuli</i> )  Phytophthora root rot ( <i>Phytophthora</i> spp.)	20.0-36.0**	<p><b>Soil Application:</b></p> <p><b>New Plantings</b></p> <p>Make a single soil application at planting.</p> <p><b>Established Plantings</b></p> <p>Make a single soil application as soon as plants begin growing in the spring.</p>	<p>Apply as a drench, or soil directed spray, or through irrigation water (micro-sprinkler, or drip).</p> <p>For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the application method does not move the product to the root zone, and rain is not imminent, then follow with irrigation.</p> <p>See <b>Section 4.1.2</b> for at-planting instructions. See <b>Section 4.5</b> for drip irrigation instructions.</p> <p>Use the higher rate in fields with a history of disease. Use Orondis Gold in conjunction with good cultural practices to manage disease.</p>

Downy mildew ( <i>Pseudoperonospora humuli</i> )	7.0 – 12**	<b>Foliar Application:</b>  <i>Provided that Orondis Gold was NOT used via soil application, make up to three foliar applications on 7- to 10-day interval, beginning prior to disease development.</i>	Apply by ground, air assisted, or air blast application. Use sufficient volume to provide thorough coverage of the foliage, and increase the volume as plants develop.  The addition of a spreading/penetrating type of adjuvant such as a non-ionic surfactant, organosilicone, or blend at labeled agricultural use rates may enhance disease control.  Use the higher rate when conditions are favorable for disease development, for longer application intervals, or for susceptible varieties.
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\*\*7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam

\*\*12.0 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.08 lb mefenoxam

\*\*20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam

\*\*36.0 fl oz is equivalent to 0.08 lb oxathiapiprolin; 0.25 lb mefenoxam

#### Resistance Management:

- Refer to **Section 3.1**.
- 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 Gold (or other oxathiapiprolin-containing product) with foliar applications of another oxathiapiprolin-containing product (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.
- Where 3 or more applications are made, use Orondis Gold (or other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 3 applications, whichever is fewer.

#### Integrated Disease Management:

- Refer to **Section 3.2**.

#### USE RESTRICTIONS

- 1) Refer to **Section 6.1** for additional product use restrictions.
- 2) **Maximum Single Application Rate:** **DO NOT** exceed maximum rate listed in the table for the application type being used.
- 3) **Maximum Number of Applications per Year:**
  - a) **Soil applications:** **DO NOT** make more than 1 applications at the maximum rate per year.
  - b) **Foliar/Fruit Application:** **DO NOT** make more than 3 application at the maximum rate per year.
- 4) **Minimum Application Interval:** 7 days
- 5) **Maximum Annual Rate:** 36.0 fl oz/A/year (equivalent to 0.08 lb ai/A/year oxathiapiprolin and 0.25 lb ai/A/year mefenoxam)
  - a) **DO NOT** apply more than 0.25 lb ai/A/year of soil-applied or 0.09 lb ai/A/year of foliar-applied oxathiapiprolin-containing products.
  - b) **DO NOT** apply more than 0.25 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam-containing products.
- 6) **Pre-harvest Interval (PHI):** 45 days

## 7.7 Leafy Greens, Subgroup 4A

<b>Crops (including all cultivars, varieties, and/or hybrids of these)</b>		
Amaranth	Cress, upland	Parsley
Arugula	Dandelion	Purslane, garden
Chervil	Dock	Purslane, winter
Chrysanthemum, edible-leaved	Endive	Radicchio

Chrysanthemum, garland Corn salad Cress, garden	Lettuce, head and leaf Orach	Spinach Spinach, New Zealand	
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Damping off ( <i>Pythium</i> spp.)	13.9-27.8**	<b>At-Planting Soil Application by any of the following methods:</b> <ul style="list-style-type: none"> <li>▪ In-furrow</li> <li>▪ Transplant water</li> <li>▪ Banded surface spray – Apply following transplanting or during seeding in a 6- to 12-inch band.</li> <li>▪ Drip irrigation – If using drip on direct-seeded crops, delay application until after emergence.</li> </ul>	See <b>Section 4.1.1</b> for directions for at-planting applications in-furrow, or as a banded surface soil spray, or in transplant water. Follow applications with overhead sprinkler irrigation within 24 hours to move the product into the soil profile.  See <b>Section 4.5.1</b> for drip irrigation instructions.  [For enhanced control of <i>Pythium</i> spp., add a mefenoxam-containing product to the spray mixture. <b>DO NOT</b> exceed 1.0 lb ai soil applied mefenoxam per application or per year.]  [If disease pressure is high, use the highest specified rate.]
**13.9 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.10 lb mefenoxam			
**27.8 fl oz is equivalent to 0.06 lb oxathiapiprolin; 0.19 lb mefenoxam			
<b>Resistance Management:</b>			
<ul style="list-style-type: none"> <li>• Refer to <b>Section 3.1</b>.</li> </ul>			
<b>Integrated Disease Management:</b>			
<ul style="list-style-type: none"> <li>• Refer to <b>Section 3.2</b>.</li> </ul>			
USE RESTRICTIONS			
<ol style="list-style-type: none"> <li>1) Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li>2) <b>Maximum Single Application Rate: DO NOT</b> exceed maximum rate listed in the table.</li> <li>3) <b>Maximum Number of Applications: DO NOT</b> make more than one at-planting soil application per crop. <b>DO NOT</b> exceed 2 applications per acre per year.</li> <li>4) <b>Maximum Annual Rate:</b> 27.8 fl oz/A/year (equivalent to 0.06 lb ai/A/year oxathiapiprolin and 0.19 lb ai/A/year mefenoxam)             <ol style="list-style-type: none"> <li>a) <b>DO NOT</b> apply more than 0.5 lb ai/A/year of oxathiapiprolin-containing products.</li> <li>b) <b>DO NOT</b> apply more than 1.0 lb ai/A/year of soil applied mefenoxam-containing products.</li> </ol> </li> <li>5) <b>DO NOT</b> use Orondis Gold in nursery production of transplants.</li> <li>6) <b>DO NOT</b> follow soil applications of Orondis Gold with foliar applications of Orondis Gold (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.</li> <li>7) <b>Pre-harvest Interval (PHI):</b> 7 days (except spinach); Spinach 21 days <b>or</b> 3 days <b>only if</b> soil application does not exceed the equivalent of 1.0 lb ai mefenoxam/A/year and foliar application does not exceed 0.25 lb ai mefenoxam/A/year</li> </ol>			



## 7.8 Potato and Other Tuberous and Corm Vegetables, 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	Leren	Yam bean	
Canna, edible	Ginger	Yam, true	
Cassava, bitter and sweet	Potato		
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Pink rot ( <i>Phytophthora erythroseptica</i> ) Pythium leak ( <i>Pythium</i> spp.) Pythium seedling disease ( <i>Pythium</i> spp.)	13.9-48.0**	<b>At-Planting Soil Application:</b> Apply in-furrow at planting.	Apply as a 6- to 8-inch band directly over the seed pieces in the furrow and then close the furrows. Make application in 3-15 gal/A. Refer to <b>Section 4.1.1</b> for additional instructions on in-furrow application.  Use the higher rate of Orondis Gold in fields with a history of pink rot or Pythium leak.  You may need to follow this in-furrow application of Orondis Gold with a foliar application of a different product such as a mefenoxam-containing or chlorothalonil-containing product (e.g. Ridomil Gold® Bravo® SC (EPA Reg. No. 100-1221)) Refer to label for specific use instructions at tuber initiation: <ul style="list-style-type: none"> <li>• when conditions are conducive for disease development;</li> <li>• when the variety is susceptible or moderately susceptible to pink rot or Pythium leak; or</li> <li>• in areas with a long growing season.</li> </ul>
Late blight ( <i>Phytophthora infestans</i> ) Pink rot ( <i>Phytophthora erythroseptica</i> ) Pythium leak ( <i>Pythium</i> spp.)	7.0-12.0**	<b>Foliar Application:</b> <i>Provided that Orondis Gold was NOT used at planting</i> , make up to two post-planting foliar applications.  Make the first foliar application at tuber initiation (Growth Stage III) and prior to tubers being larger in size than the diameter of a nickel. Make a second application 14 days later. Apply the labeled rate of a protectant	Use the higher listed rate when environmental conditions favor disease development and in fields with a history of pink rot or Pythium leak.  Apply by ground or chemigation. For ground application, apply at least 15 gal/A. For information on chemigation, see <b>Section 4.5</b> .

		fungicide between the Orondis Gold applications.	
<p>**7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam  **12.0 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.08 lb mefenoxam  **13.9 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.10 lb mefenoxam  **48.0 fl oz is equivalent to 0.11 lb oxathiapiprolin; 0.33 lb mefenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1</b>.</li> <li>Make no more than 2 sequential applications before rotating to a fungicide with a different mode of action.</li> <li>Do not follow soil applications of Orondis Gold (or other oxathiapiprolin-containing product) with foliar applications of another oxathiapiprolin-containing product (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control.</li> <li>Where 3 or more applications are made, use Orondis Gold (or other FRAC 49-containing product) in no more than 33% of the applications, or a maximum of 4 applications, whichever is fewer.</li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2</b>.</li> </ul>			
<b>USE RESTRICTIONS</b>			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate:</b> <b>DO NOT</b> exceed maximum rate listed in the table for the application type being used.</li> <li><b>Maximum Number of Applications per Year:</b> <ol style="list-style-type: none"> <li><b>Soil applications:</b> <b>DO NOT</b> make more than 1 application at the maximum rate per year.</li> <li><b>Foliar/Fruit Application:</b> <b>DO NOT</b> make more than 4 application at the maximum rate per year.</li> </ol> </li> <li><b>Minimum Application Interval:</b> 14 days</li> <li><b>Maximum Annual Rate:</b> 48.0 fl oz/A/year (equivalent to 0.11 lb ai/A/year oxathiapiprolin and 0.33 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.25 lb ai/A/year of soil-applied or 0.12 lb ai/A/year of foliar-applied oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 0.34 lb ai/A/year of soil-applied and 0.4 lb ai/A/year of foliar-applied mefenoxam-containing products.</li> </ol> </li> <li><b>Pre-harvest Interval (PHI):</b> 14 days</li> </ol>			

## 7.9 Tree Nut Group 14-12

Crops (including all cultivars, varieties, and/or hybrids of these)			
African nut-tree[*]	Coconut[*]	Monkey puzzle nut[*]	
Almond[*]	Coquito nut[*]	Okari nut[*]	
Beechnut[*]	Dika nut[*]	Pachira nut[*]	
Brazil nut[*]	Ginkgo[*]	Peach palm nut[*]	
Brazilian Pine[*]	Guiana Chestnut[*]	Pecan[*]	
Bunya[*]	Hazelnut (Filbert)[*]	Pequi Nut [*]	
Bur Oak[*]	Heartnut[*]	Pili Nut [*]	
Butternut[*]	Hickory nut[*]	Pine nut[*]	
Cajou nut[*]	Japanese horse-chestnut[*]	Pistachio[*]	
Candlenut[*]	Macadamia Nut[*]	Sapucaia nut[*]	
Cashew[*]	Mongongo nut[*]	Tropical almond[*]	
Chestnut[*]	Monkey pot[*]	Walnut, black[*]	
Chinquapin[*]		Walnut, English[*]	
		Yellowhorn[*]	
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions

Phytophthora root and crown rot ( <i>Phytophthora</i> spp.)	20.0 – 55.0**	<p><b>Resets or New Plantings:</b> Make first soil application at planting and up to one additional application 2-6 months later, coinciding with a root growth flush.</p> <p><b>Established Plantings:</b> Make up to two soil applications at a 2- to 6-month interval, coinciding with root growth flush.</p>	<p>[(<i>*Not for use in California</i>)]</p> <p>Apply as a drench or soil spray under the canopy around the base of the tree to the zone of maximum root density, or through irrigation water (micro-sprinkler, drip, flood).</p> <p>For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the application method does not move the product to the root zone, and rain is not imminent, then follow with irrigation.</p>
<p>**20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam **55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mefenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>			
<b>USE RESTRICTIONS</b>			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed the maximum rate listed in the table.</li> <li><b>Maximum Number of Applications per Year: DO NOT</b> make more than 2 applications at the maximum rate listed in the table per year.</li> <li><b>Minimum Application Interval:</b> 30 days</li> <li><b>Maximum Annual Rate:</b> 110.0 fl oz/A/year (equivalent to 0.25 lb ai/A/year oxathiapiprolin and 0.76 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.25 lb ai/A/year of oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 6.0 lb ai/A/year of mefenoxam-containing products.</li> </ol> </li> <li><b>DO NOT</b> use in nursery production of transplanted crops.</li> <li><b>Pre-harvest Interval (PHI):</b> 30 days</li> </ol>			

## 7.10 Tropical and Subtropical – Avocados, Black Sapote, Canistel, Mango, Papaya, and Star Apple ONLY

<b>Crops (including all cultivars, varieties, and/or hybrids of these)</b>			
Avocado Black Sapote Canistel	Mango Papaya Star Apple		
Target Disease	Rate (fl oz/A)	Application Timing	Use Directions
Phytophthora root and crown rot ( <i>Phytophthora</i> spp.)	20.0 – 55.0**	<p><b>Resets or New Plantings:</b> Make first soil application at planting and up to one additional application 3 months later, coinciding with a root growth flush.</p> <p><b>Established Plantings:</b> Make up to two soil</p>	<p>Apply as a drench or soil spray under the canopy around the base of the tree to the zone of maximum root density, or through irrigation water (micro-sprinkler, drip, flood).</p> <p>For effective disease control, ensure that the product solution thoroughly wets the target root zone. If the</p>

		applications on a 3 month interval, coinciding with root growth flush.	application method does not move the product to the root zone, and rain is not imminent, then follow with irrigation.
**20.0 fl oz is equivalent to 0.05 lb oxathiapiprolin; 0.14 lb mefenoxam			
**55.0 fl oz is equivalent to 0.12 lb oxathiapiprolin; 0.38 lb mefenoxam			
<b>Resistance Management:</b>			
<ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> <li>Do not follow soil applications of Orondis Gold (or other oxathiapiprolin-containing product) with foliar applications of another oxathiapiprolin-containing product (or any other FRAC 49-containing product). Use either soil applications or foliar applications but not both for disease control</li> </ul>			
<b>Integrated Disease Management:</b>			
<ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>			
<b>USE RESTRICTIONS</b>			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed maximum rate listed in the table.</li> <li><b>Maximum Number of Applications Per Year: DO NOT</b> make more than 2 application at the maximum rate listed in the table per year.</li> <li><b>Minimum Application Interval:</b> 90 days</li> <li><b>Maximum Annual Rate:</b> 110.0 fl oz/A/year (equivalent to 0.25 lb ai/A/year of soil-applied oxathiapiprolin and 0.76 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.25 lb ai/A/year of soil-applied oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 6.0 lb ai/A/year of mefenoxam-containing products for avocado, or 3.0 lb ai/A/year of mefenoxam for other crops listed.</li> </ol> </li> <li><b>DO NOT</b> use in nursery production of transplanted crops.</li> <li><b>Pre-harvest Interval (PHI):</b> 30 days</li> </ol>			

## 7.11 Tobacco

<b>Crop</b>			
Tobacco			
<b>Target Disease</b>	<b>Rate (fl oz/A)</b>	<b>Application Timing</b>	<b>Use Directions</b>
Black shank ( <i>Phytophthora parasitica</i> var. <i>nicotianae</i> ) Pythium seedling disease ( <i>Pythium</i> spp.)	13.9-27.8**	<b>At-Planting Soil Application:</b> <ul style="list-style-type: none"> <li>In-furrow</li> <li>Transplant water</li> </ul>	For control of black shank, apply in transplant water while planting tobacco seedlings. Apply in at least 200 gallons of transplant water per acre.  Use the high labeled rate if the disease epidemic is expected to be severe. Follow with an additional application of a fungicide outside of FRAC 49 (e.g., Ridomil Gold SL (EPA Reg. No. 100-1202)) at first cultivation and/or layby if necessary.  For effective disease control, apply in a sufficient volume to move the product to the root zone.
Black shank ( <i>Phytophthora parasitica</i> var. <i>nicotianae</i> ) Blue mold	7.0-36.0**	<b>Post-Planting Soil-Directed or Banded Application:</b> <i>Provided that Orondis Gold was</i>	Use the higher labeled rate in fields with a history of disease, on heavier soils, and on susceptible varieties.

<i>(Peronospora tabacina)</i>		<i>NOT used at planting, make one application at first cultivation or at layby.</i>	Position the nozzles so the spray is directed to the soil under the lower leaves and covered with soil by the cultivator.  For ground application, apply in at least 20 gallons per acre.
<p>**7.0 fl oz is equivalent to 0.02 lb oxathiapiprolin; 0.05 lb mefenoxam  **13.9 fl oz is equivalent to 0.03 lb oxathiapiprolin; 0.10 lb mefenoxam  **27.8 fl oz is equivalent to 0.06 lb oxathiapiprolin; 0.19 lb mefenoxam  **36.0 fl oz is equivalent to 0.08 lb oxathiapiprolin; 0.25 lb mefenoxam</p>			
<p><b>Resistance Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.1.</b></li> </ul>			
<p><b>Integrated Disease Management:</b></p> <ul style="list-style-type: none"> <li>Refer to <b>Section 3.2.</b></li> </ul>			
<p><b>Precautions:</b></p> <ul style="list-style-type: none"> <li>There is a risk of plant injury with <b>transplant water</b> application, especially when applied in less than 200 gallons of carrier volume per acre.</li> <li>Crop injury is more likely when applied in less than 100 gallons/acre. Injury is temporary and should disappear within three weeks.</li> <li>Pre-mixing Orondis Gold in a tank separate from the transplant water source tank will help to prevent negative interactions with fertilizers or other pesticides in the transplant water solution.</li> <li>Avoid application to stressed seedlings or during hot and dry conditions due to injury potential.</li> </ul>			
<b>USE RESTRICTIONS</b>			
<ol style="list-style-type: none"> <li>Refer to <b>Section 6.1</b> for additional product use restrictions.</li> <li><b>Maximum Single Application Rate: DO NOT</b> exceed maximum rate listed in the table.</li> <li><b>Maximum Number of Applications per Year: DO NOT</b> make more than 1 application per year.</li> <li><b>Maximum Annual Rate:</b> 36.0 fl oz/A/year (equivalent to 0.08 lb ai/A/year oxathiapiprolin and 0.25 lb ai/A/year mefenoxam) <ol style="list-style-type: none"> <li><b>DO NOT</b> apply more than 0.5 lb ai/A/year of soil-applied or 0.12 lb ai/A/year of foliar-applied oxathiapiprolin-containing products.</li> <li><b>DO NOT</b> apply more than 1.5 lb ai/A/year of mefenoxam-containing products.</li> </ol> </li> <li><b>DO NOT</b> use Orondis Gold for black shank control in PA.</li> <li><b>DO NOT</b> follow soil applications of Orondis Gold with foliar applications of Orondis Gold (or any other FRAC 49-containing product).</li> </ol>			

## 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]**

**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.**

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## 10.0 APPENDIX [Optional Text]

[Start of Optional Text]

### 10.1 Orondis Gold Rate Conversion Chart

Fl oz Product/A	Lb ai/A mefenoxam	Lb ai/A oxathiapiprolin	Acres Treated per gallon
7.0	0.05	0.02	18.3
12.0	0.08	0.03	10.7
13.7	0.09	0.03	9.3
13.9	0.10	0.03	9.2
20.0	0.14	0.05	6.4
27.8	0.19	0.06	4.6
28.0	0.19	0.06	4.6
36.0	0.25	0.08	3.6
48.0	0.33	0.11	2.7
55.0	0.38	0.12	2.3
62.0	0.43	0.14	2.1
73.0	0.50	0.17	1.8
110.0	0.76	0.25	1.2
124.0	0.85	0.28	1.0
146.0	1.00	0.33	0.9
220.0	1.51	0.50	0.6

### 10.2 Orondis Gold Use Summary Table

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



Crop or Crop Group Subgroup with examples	Maximum Rate Per Application (lb ai/A)		Maximum Annual Application Rate (lb ai/A/year)		Minimum Application Interval Days	Pre-harvest Interval (PHI days)
	Mefenoxam	Oxathiapiprolin	Mefenoxam	Oxathiapiprolin		
<b>Asparagus</b>	0.5 soil	0.17 soil	1.0 soil	0.50	14	1
<b>Berries</b>						
<b>Bushberry Subgroup 13-07B, except lowbush blueberry</b> Blueberry, highbush	0.38 soil	0.12 soil	3.6 soil	0.50 soil	30	1
<b>Caneberry, Subgroup 13-07A</b> Blackberry Raspberry	0.76 soil	0.25 soil	1.8 soil	0.50	7	45
<b>Strawberry</b>	0.43 soil 0.10 foliar	0.14 soil 0.03 foliar	1.5 soil 0.19 foliar	0.29 soil 0.06 foliar	30	28 soil 0 foliar
<b>Cucurbit Vegetables (Crop Group 9):</b> cucumber, pumpkin	0.38 soil 0.08 foliar	0.12 soil 0.03 foliar	1.0 soil 0.5 foliar	0.50 soil 0.12 foliar	20	5
<b>Fruiting Vegetables:</b> eggplant, peppers	0.38 soil 0.08 foliar	0.12 soil 0.03 foliar	1.5 soil 0.5 foliar	0.50 soil 0.12 foliar	30 for all fruiting veg except tomato, 28 for tomato	7
<b>Ginseng</b>	0.33 soil	0.11 soil	0.38	0.50	NA	14
<b>Hops</b>	0.25 soil 0.08 foliar	0.08 soil 0.03 foliar	0.25 soil 0.5 foliar	0.25 soil 0.09 foliar	7	45
<b>Leafy Greens (Crop Subgroup 4A):</b> Lettuce Spinach	0.19 soil	0.06 soil	1.0 soil	0.50	NA	7 (except spinach) Spinach 21 or 3 (see Section 7.7)
<b>Nut, Tree Crop Group 14-12</b> Almond Pecan	0.38 soil	0.12 soil	6.0	0.25	30	30
<b>Potato and Other Tuberous and Corm Vegetables (Subgroup 1C)</b> Potato	0.33 soil 0.08 foliar	0.11 soil 0.03 foliar	0.34 soil 0.4 foliar	0.25 soil 0.12 foliar	14	14

<b>Tropical and Subtropical - Avocados, Black Sapote, Canistel, Mango, Papaya, and Star Apple only</b>	0.38 soil	0.12 soil	3.0 for all tropical fruits except avocado, 6.0 for avocado	0.25 soil	90	30
<b>Tobacco</b>	0.25 soil	0.08 soil	1.5	0.50 soil	NA	NA

[End of Optional Text]

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