

ORONDIS OPTI A

Date: 9/29/2015
 Replaces: 7/27/2015

1. PRODUCT IDENTIFICATION

Product identifier on label: **ORONDIS OPTI A**
 Product No.: A20941A
 Use: Fungicide
 Manufacturer: Syngenta Crop Protection, LLC
 Post Office Box 18300
 Greensboro NC 27419
 Manufacturer Phone: 1-800-334-9481

Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications: Skin Sensitizer: Category 1B
 Signal Word (OSHA): Warning
 Hazard Statements: May cause an allergic skin reaction

Hazard Symbols:



Precautionary Statements: Avoid breathing mist, vapors, spray.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves, protective clothing, eye protection.
 If on skin: Wash with plenty of soap and water.
 If skin irritation or rash occurs: Get medical advice.
 See Section 4 First Aid Measures.
 Wash contaminated clothing before reuse.
 Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | Common Name | CAS Number | Concentration |
|-------------------|-------------------|--------------|---------------|
| Other ingredients | Other ingredients | Trade Secret | 89.8% |
| Oxathiapiprolin | Oxathiapiprolin | 1003318-67-9 | 10.2% |

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

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4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Most important symptoms/effects:

Allergic skin reaction

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

None known.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

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7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Not Applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

| Chemical Name | OSHA PEL | ACGIH TLV | Other | Source |
|-------------------|-----------------|-----------------|-----------------|----------------|
| Other ingredients | Not Established | Not Established | Not Established | Not Applicable |
| Oxathiapiprolin | Not Established | Not Established | Not Established | Not Applicable |

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use splash-proof chemical goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact:

Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear.

Inhalation:

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White Liquid

Odor: Not determined

Odor Threshold: Not Applicable

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pH: Not Available
 Melting point/freezing point: Not Available
 Initial boiling point and boiling range: Not Applicable
 Flash Point (Test Method): >93°C
 Flammable Limits (% in Air): Not Available
 Flammability: Not Available
 Vapor Pressure: Oxathiapiprolin Not Available
 Vapor Density: Not Available
 Relative Density: 1 g/ml
 Solubility (ies): Oxathiapiprolin Not Available
 Partition coefficient: n-octanol/water: Not Available
 Autoignition Temperature: Not Available
 Decomposition Temperature: Not Available
 Viscosity: Not Available
 Other: None

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.
 Chemical stability: Stable under normal use and storage conditions.
 Possibility of hazardous reactions: Will not occur.
 Conditions to Avoid: Elevated temperatures, static electricity, mechanical sparks, open flames
 Incompatible materials: None known.
 Hazardous Decomposition Products: Not Available

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Rash, redness or itching

Delayed, immediate and chronic effects of exposure: Allergic skin reaction

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

| | | |
|-------------|-------------------------|---|
| Ingestion: | Oral (LD50 Rat) : | > 5000 mg/kg (calculated based on similar formulations) |
| Dermal: | Dermal (LD50 Rat) : | > 5000 mg/kg (calculated based on similar formulations) |
| Inhalation: | Inhalation (LC50 Rat) : | > 5.1 mg/l |

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Eye Contact: Non-Irritating (Rabbit)
 Skin Contact: Mildly Irritating (Rabbit)
 Skin Sensitization: May cause sensitization by skin contact.

Reproductive/Developmental Effects

Oxathiapiprolin: Animal testing showed no reproductive toxicity. Slight delays in maturation observed in rats.

Chronic/Subchronic Toxicity Studies

Oxathiapiprolin: No toxicologically significant effects were found in rat, dog or mouse.

Carcinogenicity

Oxathiapiprolin: Animal testing did not show any carcinogenic effects.

| Chemical Name | NTP/IARC/OSHA Carcinogen |
|-------------------|--------------------------|
| Other ingredients | No |
| Oxathiapiprolin | No |

Other Toxicity Information

Not Available

Toxicity of Other Components

Other ingredients
 Not Established

Target Organs

Active Ingredients

Oxathiapiprolin: Not Applicable

Inert Ingredients

Other ingredients: Not Established

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Oxathiapiprolin:
 Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.67 mg/l
 Green Algae 96-hour ErC50 >0.142 mg/l
 Fish (Rainbow Trout) 96-hour LC50 >0.69 mg/l

Environmental Fate

Oxathiapiprolin:
 Not Available

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13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Not regulated by DOT unless shipped in bulk package or by water

Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Oxathiapiprolin), Marine Pollutant

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

Air Transport

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Oxathiapiprolin)

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

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

EPA Registration Number(s):

100-1572

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: None

CERCLA/SARA 304 Reportable Quantity (RQ):

Not Applicable

RCRA Hazardous Waste Classification (40 CFR 261):

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Not Applicable

TSCA Status:

TSCA R & D Exempt

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 1
Flammability: 1
Instability: 0

HMIS Hazard Ratings

Health: 1
Flammability: 1
Reactivity: 0

| | |
|---|----------|
| 0 | Minimal |
| 1 | Slight |
| 2 | Moderate |
| 3 | Serious |
| 4 | Extreme |
| * | Chronic |

Syngenta Hazard Category: C,S

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 7/27/2015

Revision Date: 9/29/2015

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Section(s) Revised:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.