

# Safety Data Sheet



## OPTIGARD® FLEX LIQUID

Date: 8/4/2015

Replaces: 3/26/2015

### 1. PRODUCT IDENTIFICATION

Product identifier on label: **OPTIGARD® FLEX LIQUID**

Product No.: A9795B

Use: Insecticide

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: Not Applicable

Signal Word (OSHA): Not Applicable

Hazard Statements: Not Applicable

Hazard Symbols:

Precautionary Statements: Not Applicable

Other Hazard Statements: None

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name  | Common Name       | CAS Number   | Concentration |
|--|-------------------|--------------|---------------|
| Glycerin   | Glycerin          | 56-81-5      | Trade Secret  |
| Other ingredients  | Other ingredients | Trade Secret | <78.4%        |
| 3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine | Thiamethoxam      | 153719-23-4  | 21.6%         |

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:

Not Applicable

#### 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 CO<sub>2</sub> extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

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         |
|-------------------|--|-----------------|-------------------------|----------------|
| Glycerin          | 15 mg/m <sup>3</sup> TWA (total); 5 mg/m <sup>3</sup> TWA (respirable) | Not Established | Not Established         | Not Applicable |
| Other ingredients | Not Applicable   | Not Applicable  | Not Applicable          | Not Applicable |
| Thiamethoxam      | Not Established  | Not Established | 3 mg/m <sup>3</sup> TWA | Syngenta       |

#### 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 chemical splash goggles.

##### Skin Contact:

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

##### Inhalation:

A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Beige to brown liquid

Odor: Aromatic

Odor Threshold: Not Available

pH: 5 - 7 (1% suspension in water)

Melting point/freezing point: Not Applicable

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Initial boiling point and boiling range: Not Available

Flash Point (Test Method): 208°F

Flammable Limits (% in Air): Not Available

Flammability: Not Applicable

Vapor Pressure: Thiamethoxam 2 x 10(-11) mmHg @ 68°F (20°C)

Vapor Density: Not Available

Relative Density: 1.127 g/cm³

Solubility (ies): Thiamethoxam 4.1 g/l @ 77°F (25°C)

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: None known.

Incompatible materials: None known.

Hazardous Decomposition Products: None known.

## 11. TOXICOLOGICAL INFORMATION

### Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Not Applicable

Delayed, immediate and chronic effects of exposure: Not Applicable

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

Ingestion: Oral (LD50 Rat) : > 5000 mg/kg body weight

Dermal: Dermal (LD50 Rabbit) : > 2000 mg/kg body weight

Inhalation: Inhalation (LC50 Rat) : > 2.67 mg/l air - 4 hours

Eye Contact: Minimally Irritating (Rabbit)

Skin Contact: Slightly Irritating (Rabbit)

Skin Sensitization: Not a Sensitizer (Guinea Pig)

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### Reproductive/Developmental Effects

Thiamethoxam: Developmental: Not teratogenic in rats or rabbits.

Reproductive: No effects on reproduction. Minor increase in a common testis effect in rats at high doses, which did not affect reproduction.

### Chronic/Subchronic Toxicity Studies

Thiamethoxam: Subchronic: Liver effects occurred in rodents only at high dose levels. Not neurotoxic after high acute and subchronic exposure in rats.

### Carcinogenicity

Thiamethoxam: Classified as "not likely to be carcinogenic in humans" based on lifetime studies in mice and rats.

| Chemical Name  | NTP/IARC/OSHA Carcinogen |
|--|--------------------------|
| Glycerin   | No                       |
| Other ingredients  | No                       |
| 3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine | No                       |

### Other Toxicity Information

None

### Toxicity of Other Components

Glycerin

Repeated or prolonged exposure to concentrated solutions may result in dermatitis.

Other ingredients

Not Applicable

### Target Organs

#### Active Ingredients

Thiamethoxam: Liver

#### Inert Ingredients

Glycerin: Skin

Other ingredients: Not Applicable

## 12. ECOLOGICAL INFORMATION

### Eco-Acute Toxicity

Thiamethoxam:

Fish (Rainbow Trout) 96-hour LC50 > 100 ppm

Bird (Mallard Duck) LD50 Oral 576 mg/kg

Invertebrate (Daphnia Magna) 48-hour EC50 > 106 ppm

Green Algae 4-day EC50 > 97 ppm

### Environmental Fate

Thiamethoxam:

The information presented here is for the active ingredient, thiamethoxam.

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Not persistent in soil. Stable in water. Moderate mobility in soil. Floats in water (after 24 h).

### 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

#### Comments

##### Water Transport - International

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

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: Harmful if inhaled or absorbed through skin. Do not breathe vapor or spray mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### EPA Registration Number(s):

100-1306

#### EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: None

#### CERCLA/SARA 304 Reportable Quantity (RQ):

None

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RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

Exempt from TSCA, subject to FIFRA

### 16. OTHER INFORMATION

#### NFPA Hazard Ratings

Health:

1

Flammability:

1

Instability:

0

Syngenta Hazard Category: A

#### HMIS Hazard Ratings

Health:

1

Flammability:

1

Reactivity:

0

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

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 2/26/2008

Revision Date: 8/4/2015

Replaces: 3/26/2015

Section(s) Revised: 2, 4, 11, 16

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.