1. PRODUCT IDENTIFICATION

Product Name: OPTIGARD ANT GEL BAIT

EPA Signal Word: Caution

Active Ingredient(%): Thiamethoxam (0.01%)

Chemical Name: 4H-1,3,5-Oxadiazin-4-imine,3-[(2-chloro-5-thiazolyl)methyl]tetrahydro-5-methyl-N-nitro-

Chemical Class: Neonicotinoid Insecticide

EPA Registration Number(s): 100-1260

Section(s) Revised: New

2. HAZARDS IDENTIFICATION

Health and Environmental

Irritating to eyes and skin.

Hazardous Decomposition Products

May decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Colorless to clear solid

Odor: Odorless

Unusual Fire, Explosion and Reactivity Hazards

This product will undergo a very strong exothermic decomposition reaction at 300°F.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Material</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>NTP/IARC/OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamethoxam (0.01%)</td>
<td>Not Established</td>
<td>Not Established</td>
<td>3 mg/m³ TWA ***</td>
<td>No</td>
</tr>
</tbody>
</table>

*** Syngenta Occupational Exposure Limit (OEL)

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

Syngenta Hazard Category: B

4. FIRST AID MEASURES

Have the product container, label or Material 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. Have the person sip a glass of water if able to swallow. 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.

Notes to Physician

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (Test Method):</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammable Limits (% in Air):</td>
<td>Lower: Not Applicable</td>
</tr>
<tr>
<td></td>
<td>Upper: Not Applicable</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Unusual Fire, Explosion and Reactivity Hazards

This product will undergo a very strong exothermic decomposition reaction at 300°F.

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

In Case of Fire

Use dry chemical, foam or CO2 extinguishing media. 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. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

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. Sweep up material and place in a 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.

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

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.
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless to clear solid
Odor: Odorless
Melting Point: Not Available
Boiling Point: Not Applicable
Specific Gravity/Density: 1.26 g/cm³ @ 68°F (20°C)
pH: 6.6 (1% in deionized H2O @ 77°F (25°C))

Solubility in H2O
Thiamethoxam: 4.1g/l @ 77°F (25°C)

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

10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: None known.
Materials to Avoid: None known.
Hazardous Decomposition Products: May decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)
Ingestion: Practically Non-Toxic
Oral (LD50 Female Rat): > 5,000 mg/kg body weight
Dermal: Practically Non-Toxic
Dermal (LD50 Rat): > 5,050 mg/kg body weight
Inhalation: Practically Non-Toxic
Inhalation (LC50 Rat): > 2.61 mg/l air - 4 hours

Eye Contact: Minimally Irritating (Rabbit)
Skin Contact: Practically Non-Irritating (Rabbit)
Skin Sensitization: Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects
Reproductive: No biologically important reproductive effects. Minor testis effects at high doses with no effect on reproduction.

Chronic/Subchronic Toxicity Studies
Thiamethoxam: Subchronic: Predominantly liver and kidney effects at high doses. Not neurotoxic.
Chronic: Predominantly liver and kidney effects at high doses.
Acute: Transient clinical signs at high doses. No changes to nervous tissue.

Carcinogenicity
Thiamethoxam: Liver tumors at high doses noted in mice that are not relevant to humans. No treatment-related tumors in rats.

Other Toxicity Information
None

Toxicity of Other Components
Not Applicable

Target Organs
Active Ingredients
Thiamethoxam: Liver, kidney
Inert Ingredients
Not Applicable

12. ECOLOGICAL INFORMATION

Summary of Effects
Thiamethoxam:
Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Eco-Acute Toxicity
Thiamethoxam:
Fish (Rainbow Trout) 96-hour LC50 > 100 ppm
Fish (Bluegill Sunfish) 96-hour LC50 > 114 ppm
Bird (Mallard Duck) LD50 Oral 576 mgk
Invertebrate (Daphnia Magna) 48-hour EC50 > 106 ppm
Bird (Bobwhite Quail) 8-day dietary LC50 > 5200 ppm
Bee (Contact) LD50 0.024 ug/bee
Bird (Mallard Duck) 8-day dietary LC50 > 5200 ppm
Green Algae 4-day EC50 > 97 ppm

Eco-Chronic Toxicity
Thiamethoxam:
Invertebrate (Water Flea) 21-day LOEC 101 ppm
Fish (Fathead Minnow) LOEC 900 ppm

Environmental Fate
Thiamethoxam:
The information presented here is for the active ingredient, thiamethoxam.

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.

**B/L Freight Classification**
Insecticides, NOIBN, O/T Poison

**Comments**
Water Transport - International
Not regulated.

Air Transport - International
Not regulated.

15. **REGULATORY INFORMATION**

**EPCRA SARA Title III Classification**
- Section 311/312 Hazard Classes: Acute Health Hazard
- Section 313 Toxic Chemicals: Not Applicable

**California Proposition 65**
Not Applicable

**CERCLA/SARA 302 Reportable Quantity (RQ)**
None

**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

**HMIS Hazard Ratings**
- Health: 1
- Flammability: 1
- Reactivity: 0

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Minimal</td>
</tr>
<tr>
<td>1</td>
<td>Slight</td>
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<tr>
<td>2</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>Serious</td>
</tr>
<tr>
<td>4</td>
<td>Extreme</td>
</tr>
</tbody>
</table>

For non-emergency questions about this product call:
1-800-334-9481

**Original Issued Date:** 12/7/2006

**Revision Date:**
Replaces:

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End of MSDS