## United States

### Material Safety Data Sheet

The Ortho Group  
P.O. Box 190  
Marysville, Ohio 43040  
United States

<table>
<thead>
<tr>
<th>24 h. EMERGENCY TELEPHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMTREC (U.S.) 1-800-424-9300</td>
</tr>
<tr>
<td>CHEMTREC (International) 1-703-527-3887</td>
</tr>
<tr>
<td>Non-Emergency Calls 1-937-644-0011</td>
</tr>
</tbody>
</table>

**ORTHOG DEER B GON DEER & RABBIT REPELLENT READY-TO-SPRAY**

### 1. Product and company identification

<table>
<thead>
<tr>
<th>MSDS #</th>
<th>320000004609</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA Registration Number:</td>
<td>EXEMPT</td>
</tr>
</tbody>
</table>

### 2. Hazards identification

**Physical state**: liquid [liquid]

**Color**: Yellow.

**Odor**: Cinnamon

**OSHA/HCS status**: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Emergency Overview**: No harmful effects expected.

#### Potential acute health effects

- **Inhalation**: No known significant effects or critical hazards.
- **Ingestion**: Harmful if swallowed.
- **Skin**: Harmful in contact with skin.
- **Eyes**: No known significant effects or critical hazards.

**Target organs**: Contains material which causes damage to the following organs:

- skin
- stomach

#### Potential chronic health effects

See section 11 for more information.

#### Over-exposure signs/symptoms

- **Inhalation**: No specific data.
- **Ingestion**: No specific data.
- **Skin**: No specific data.
- **Eyes**: No specific data.

**Medical conditions aggravated by over-exposure**: None known.

See toxicological information (Section 11)

### 3. Composition/information on ingredients
<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chloride (NaCl)</td>
<td>7647-14-5</td>
<td>&gt;1 - &lt;=3</td>
</tr>
<tr>
<td>Oils, clove Extractives and their physically modified derivatives. Eugenia caryophyllata or Caryophyllus aromaticus, Myrtaceae.</td>
<td>8000-34-8</td>
<td>&gt;1 - &lt;=3</td>
</tr>
</tbody>
</table>

### 4. First aid measures

**Eye contact**: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin contact**: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**Inhalation**: 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 a poison control center or doctor for further treatment advice.

**Ingestion**: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person.

**Notes to physician**: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### 5. Fire-fighting measures

**Flammability of the product**: In a fire or if heated, a pressure increase will occur and the container may burst.

**Extinguishing media**

- **Suitable**: Use an extinguishing agent suitable for the surrounding fire.
- **Not suitable**: None known.

**Special exposure hazards**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Hazardous thermal decomposition products**: Decomposition products may include the following materials:
- halogenated compounds
- metal oxide/oxides

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 6. Accidental release measures

**Personal precautions**: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions**: No specific hazard.
7. Handling and storage

Handling : Avoid inhalation or contact with skin, eyes or clothing. Avoid container breakage. Do not contaminate water sources when disposing of equipment washwater or rinsate. Keep out of lakes, stream or ponds. Keep out of reach of children.

Storage : Keep from freezing. Store in original container in a cool, dry, well-ventilated area inaccessible to children and pets. Do not contaminate food or feedstuffs.

8. Exposure controls/personal protection

Occupational exposure limits

No exposure standard allocated. Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use adequate ventilation to keep the airborne concentrations below the recommended exposure standard.

Hygiene measures : Wash thoroughly with soap and water after handling. Remove and launder contaminated clothing before reuse.

Personal protection

Respiratory : No special respiratory protection required. If ventilation is inadequate to keep the airborne concentrations below the recommended exposure standard wear appropriate respiration protection.

Hands : Protective gloves are not required, but may be used in situations were significant contact is expected.

Eyes : Protective eyewear is not required, but may be used in situations were contact is expected.

Skin : No special protective clothing is required.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state : liquid [liquid]
### Flash point

>: &gt; 200 °C (392.00 °F)

### Burning time

**: Not Applicable

### Auto-ignition temperature

**: Not Applicable

### Flammable limits

**: Not Applicable

### Density

**: 1.01 g/cm³

### Color

**: Yellow.

### Odor

**: Cinnamon

### pH

**: Not Applicable

### Boiling/condensation point

**: Not Applicable

### Melting/freezing point

**: Not Applicable

### Relative density

**: 1.01

### Vapor pressure

**: Not Applicable

### Vapor density

**: Not Applicable

### Volatility

**: Not Applicable

### Odor threshold

**: Not Applicable

### Evaporation rate

**: Not Applicable

### Viscosity

**: Not Applicable

### Solubility

**: Not Applicable

### Solubility in water

**: Not Applicable

## 10. Stability and reactivity

### Chemical stability

**: The product is stable.

### Conditions to avoid

**: No specific data.

### Incompatible materials

**: No specific data.

### Hazardous decomposition products

**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### Possibility of hazardous reactions

**: Under normal conditions of storage and use, hazardous reactions will not occur.

## 11. Toxicological information

### Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chloride (NaCl)</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3,000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Oils, clove Extractives and their physically modified derivatives. Eugenia caryophyllata or Caryophyllus aromaticus, Myrtaceae.</td>
<td>TDLo Oral</td>
<td>Infant</td>
<td>1,000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Oils, clove Extractives and their physically modified derivatives. Eugenia caryophyllata or Caryophyllus aromaticus, Myrtaceae.</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1,370 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Oils, clove Extractives and their physically modified derivatives. Eugenia caryophyllata or Caryophyllus aromaticus, Myrtaceae.</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2,650 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>
Oils, clove Extractives and their physically modified derivatives. Eugenia caryophyllata or Caryophyllus aromaticus, Myrtaceae.

LD50 Oral  Rat  2,020 mg/kg  -

LD50 Dermal  Rabbit  1,200 mg/kg  -

LD50 Dermal  Rabbit  5,000 mg/kg  -

LD50 Dermal  Rabbit  > 5,000 mg/kg  -

Conclusion/Summary  No known significant effects or critical hazards.

Irritation/Corrosion

Skin  May cause skin irritation.
Eyes  May cause eye irritation.
Respiratory  Non-irritating

Sensitizer

Conclusion/Summary  Skin  Not sensitizing
Respiratory  Not sensitizing

Chronic toxicity

Conclusion/Summary  No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary  No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary  No known significant effects or critical hazards.

Teratogenicity

Product/ingredient name

Conclusion/Summary  No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary  No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity  :  No known significant effects or critical hazards.
Aquatic ecotoxicity

Conclusion/Summary : No known significant effects or critical hazards.

Persistence/degradability

Conclusion/Summary : No known significant effects or critical hazards.

Partition coefficient: n-octanol/water : No known significant effects or critical hazards.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal : Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN no.</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>PG*</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IATA (C)</td>
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<td>Not Regulated</td>
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<td></td>
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<tr>
<td>IATA (P)</td>
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<td></td>
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<tr>
<td>IMDG</td>
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<td>Not Regulated</td>
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<td></td>
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<tr>
<td>TDG</td>
<td></td>
<td>Not Regulated</td>
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<td></td>
<td></td>
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<tr>
<td>PG* : Packing group</td>
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</tbody>
</table>

15. Regulatory information

United States

U.S. Federal regulations : SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

United States inventory (TSCA) : All components are listed or exempted.
8b)

**State regulations**

**Massachusetts**
- The following components are listed: Sulfuric acid sodium salt (1:2)

**New York**
- None of the components are listed.

**New Jersey**
- None of the components are listed.

**Pennsylvania**
- The following components are listed: Sulfuric acid sodium salt (1:2)

**California Prop. 65**
- Not listed.

**International regulations**

**Canada inventory**
- Not determined.

**International lists**

- **Australia inventory (AICS):** Not determined.
- **Japan inventory:** Not determined.
- **China inventory (IECSC):** Not determined.
- **Korea inventory:** Not determined.
- **New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- **Philippines inventory (PICCS):** Not determined.

### 16. Other information

**Hazardous Material Information System (U.S.A.):**

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

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The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.):**

- Flammability
- Health 1
- Instability/Reactivity 0
- Special

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Date of printing : Print date
Date of issue : Validity date***
Version : Report version

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