United States
Material Safety Data Sheet

The Ortho Group
P.O. Box 190
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United States

ORTHO TREE & SHRUB INSECT CONTROL GRANULES

Section 1. Identification

GHS product identifier : ORTHO TREE & SHRUB INSECT CONTROL GRANULES
Product type : Pesticide
SDS # : 320000004263
EPA Registration Number : 59639-162-239

Relevant identified uses of the substance or mixture and uses advised against
Use only in accordance with label directions.

Section 2. Hazards identification

This product is regulated by the Environmental Protection Agency (EPA) for label precautionary text see Section 15.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture : EYE DAMAGE/IRRITATION - Category 2B

GHS label elements

Signal word : Warning
Hazard statements : Causes eye irritation.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention : Wear eye or face protection. Wash hands thoroughly after handling.
Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage : Not applicable.
Disposal : Not applicable.


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Supplemental label elements : None known.
Hazards not otherwise classified : None known.

### Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture
**Chemical name** : Not available.
**Other means of identification** : Not available.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**Occupational exposure limits, if available, are listed in Section 8.**

### Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

- **Eye contact** : Causes eye irritation.
- **Inhalation** : No known significant effects or critical hazards.
- **Skin contact** : No known significant effects or critical hazards.
- **Ingestion** : May be irritating to mouth, throat and stomach.

**Over-exposure signs/symptoms**

- **Eye contact** : Adverse symptoms may include the following: irritation
Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical
Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters : 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.

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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See
also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits
None.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Protective eyewear is not required, but may be used in situations were contact is expected.

Skin protection

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

Body protection: Wear long-sleeved shirt, long pants, shoes with socks. Remove and wash contaminated clothing before reuse.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state: solid [Granule]
Color: Brown.

Odor: Slight
Odor threshold: Not available.

pH: Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits

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Vapor pressure : Not available.
Vapor density : Not available.
Relative density : Not available.
Solubility : Not available.
Partition coefficient: n-octanol/water : Not available.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Dynamic: Not available.
            Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.
Chemical stability : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
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.

Section 11. Toxicological information

Information on toxicological effects

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></td>
<td>LD50 Oral</td>
<td>Rat - Male/Female</td>
<td>&gt; 5,000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation</td>
<td>Rat</td>
<td>&gt; 5 mg/l</td>
<td>4 h</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>&gt; 5,000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary : Very low toxicity to humans or animals.

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes - Redness of the conjunctivae</td>
<td>Rabbit</td>
<td>2.0</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Skin - Erythema/Eschar</td>
<td>Rabbit</td>
<td>1.0</td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
Conclusion/Summary
Skin: Mildly irritating
Eyes: Moderate
Respiratory: May cause respiratory irritation

Sensitization

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td></td>
<td>Guinea pig</td>
<td>Not sensitizing</td>
</tr>
</tbody>
</table>

Conclusion/Summary
Skin: Not sensitizing
Respiratory: Not sensitizing - based on the individual components.

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

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

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

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

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Velcro Closure

Information on the likely routes of exposure: Not available.

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

General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity
Conclusion/Summary : Not available.

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

Mobility in soil
Soil/water partition coefficient (KOC) : Not available.
Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 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>
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</thead>
<tbody>
<tr>
<td>DOT</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA (C)</td>
<td></td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA (P)</td>
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<td></td>
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<tr>
<td>IMDG</td>
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Regulatory information

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<th>Note</th>
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</thead>
<tbody>
<tr>
<td>TDG</td>
<td>Not Regulated</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PG*    : Packing group</td>
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</table>

Special precautions for user: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

Precautionary statements

**Signal word**: CAUTION!

**Emergency Overview**
- Keep out of reach of children.
- Harmful if absorbed through the skin.
- Causes moderate eye irritation.
- Avoid contact with eyes, skin and clothing.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

**U.S. Federal regulations**
- United States inventory (TSCA 8b):
  - Not determined.

State regulations

**California Prop. 65**
- Not available.

International lists

**National inventory**
- Australia: Not determined.
- Canada: Not determined.
- China: Not determined.
- Europe: Not determined.
- Japan: Not determined.
- Malaysia: Not determined.
- New Zealand: Not determined.
- Philippines: Not determined.
- Republic of Korea: Not determined.
- Taiwan: Not determined.

Section 16. Other information

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<tr>
<td></td>
<td></td>
<td></td>
<td>11/24/2013</td>
</tr>
</tbody>
</table>
National Fire Protection Association (U.S.A.):

Flammability

Health

Instability/Reactivity

Special

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History

Date of issue/Date of revision : Validity date***.

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