Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • Prentox Rotenone Fish Toxicant Powder
Synonyms • 100209044; 100209045; EPA Reg. No.: 89459-32
Product Description • Tan to dark amber powder.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Piscicide.
Restrictions on use • Avoid contact with eyes, skin or clothing. Do not inhale. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer • Central Garden & Pet Company
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States

www.zoecon.com

Emergency telephone number

Manufacturer • 1-800-424-9300 - CHEMTREC
Manufacturer (Transportation) • 1-703-527-3887 - Chemtrec - Outside US collect calls accepted
Manufacturer • 1-800-248-7763

Section 2: Hazard Identification

United States (US)
According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Acute Toxicity Inhalation 1
                • Combustible Dust
                • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
                • Eye Mild Irritation 2B
                • Skin Sensitization 1
                • Acute Toxicity Oral 3

Label elements

OSHA HCS 2012

DANGER
Hazard statements

- Fatal if swallowed
- Fatal if inhaled
- May cause an allergic skin reaction
- Causes eye irritation
- May cause respiratory irritation
- May form combustible dust concentrations in air.

Precautionary statements

Prevention

- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Do not breathe dust, fume, gas, mist, vapors and/or spray.
- In case of inadequate ventilation wear respiratory protection.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves.

Response

- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell. Immediately call a POISON CENTER or doctor/physician.
- 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 advice/attention.
- IF ON SKIN: Wash with plenty of soap and water.
  If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage/Disposal

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.

Other hazards

OSHA HCS 2012

- This product is extremely toxic to fish. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotenone</td>
<td>CAS:83-79-4</td>
<td>8.74%</td>
</tr>
<tr>
<td>Cube Resins other than rotenone</td>
<td>NDA</td>
<td>13.11%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>Balance</td>
</tr>
</tbody>
</table>
Section 4: First-Aid Measures

Description of first aid measures

Inhalation

• IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CONTROL center or doctor.

Skin

• IF ON SKIN: Wash skin with soap and water. If irritation develops and persists, get medical attention.

Eye

• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.

Ingestion

• IF SWALLOWED: Immediately call a poison control center or doctor. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

• Fatal if inhaled, toxic if ingested, causes respiratory irritation if sub-lethal doses are inhaled, causes an allergic skin reaction in individuals with a sensitivity to rotenone, causes skin irritation. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

• If a small amount is ingested (or if treatment is delayed), oral administration of large amounts of activated charcoal and a cathartic is probably sufficient therapy. Do not administer milk, cream or other substances containing vegetable or animal fats, which enhance the absorption of lipophilic substances. Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media

• Use water fog, foam, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media

• Avoid heavy hose streams.

Firefighting Procedures

• Do not allow fire fighting water to escape into waterways or sewers. Isolate fire area and evacuate downwind. Do not breathe gases, smoke or vapors generated. Ventilate closed spaces before entering. Wear appropriate protective clothing.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

• Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous Combustion Products

• Combustible dust. Irritating or toxic substances may be emitted upon burning, combustion or decomposition.

Advice for firefighters
• Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

• Avoid contact with skin, eyes, and clothing. Wear appropriate personal protective equipment, avoid direct contact. Ventilate enclosed areas.

Emergency Procedures

• Avoid release into the environment. Avoid unnecessary personnel and equipment traffic in the spill area. Wear appropriate personal protective equipment (PPE). Stay upwind. Stop leak if you can do it without risk. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contain spill and monitor for excessive dust accumulation.

Environmental precautions

• Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

• Sweep or scoop up spills, dispose of any unusable material in approved landfill. Use appropriate Personal Protective Equipment (PPE.) Avoid generating dust. Use clean nonsparking tools to collect material. Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

• Do not use in areas without adequate ventilation. Avoid breathing dust. All equipment used when handling the product must be grounded. Avoid contact with skin, eyes, and clothing. Take precautionary measures against static charges. Wash hands thoroughly with soap and water after handling. Wear appropriate personal protective equipment including long-sleeved shirt, long pants, chemical resistant gloves, shoes and socks. Avoid direct contact. The grounding of personnel is generally recommended when they may be exposed to a flammable or combustible atmosphere having a Minimum Ignition Energy (MIE) of 50 mJ or less.

Conditions for safe storage, including any incompatibilities

Storage

• Store in cool, dry area, inaccessible to children. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Avoid direct sunlight. Avoid extreme temperatures.

Incompatible Materials or Ignition Sources

• Heat, sparks, open flame. Strong acids, strong bases, and oxidizing agents.

Section 8 - Exposure Controls/Personal Protection

Control parameters
### Exposure Limits/Guidelines

<table>
<thead>
<tr>
<th>Rotenone (83-79-4)</th>
<th>Result</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWAs</td>
<td>5 mg/m³ TWA (commercial)</td>
<td>5 mg/m³ TWA</td>
<td>5 mg/m³ TWA</td>
<td></td>
</tr>
</tbody>
</table>

### Exposure Limits Supplemental

**ACGIH**
- Rotenone (83-79-4): TLV Basis - Critical Effects: (CNS impairment; eye and upper respiratory tract irritation)

### Exposure controls

**Engineering Measures/Controls**
- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

### Personal Protective Equipment

**Pictograms**

- Respiratory
  - When handling undiluted product, wear either a respirator with an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix 14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.

- Eye/Face
  - Wear safety glasses.

- Hands
  - Wear chemical resistant gloves (Neoprene, Nitrile rubber or PVC.)

- Skin/Body
  - Wear long-sleeved shirt, long pants, shoes, and socks.

### General Industrial Hygiene Considerations

- Handle in accordance with good industrial hygiene and safety practice.

### Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and accidental release to waterways.

### Section 9 - Physical and Chemical Properties

#### Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>General Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material Description</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Physical Form</strong></td>
<td>Solid</td>
<td>Tan to dark amber powder.</td>
<td></td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Tan to dark amber.</td>
<td>Odor: Wet chalk or dirt-like.</td>
<td></td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>No data available</td>
<td>Melting Point/Freezing Point: 165 to 166 °C (329 to 330.8 °F)</td>
<td></td>
</tr>
<tr>
<td><strong>Decomposition Temperature</strong></td>
<td>No data available</td>
<td>pH: Not relevant</td>
<td></td>
</tr>
<tr>
<td><strong>Specific Gravity/Relative Density</strong></td>
<td>1.27 Water=1</td>
<td>Bulk Density</td>
<td>Tapped: 0.45 g/cc (28.1 lb/ft³) Loose: 0.24 g/cc (28.1 lb/ft³)</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>Insoluble</td>
<td>Viscosity</td>
<td>Not relevant</td>
</tr>
<tr>
<td><strong>Explosive Properties</strong></td>
<td>Minimum Ignition Energy – Dust Cloud (mJ): 3-5 (5% Rotenone)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Preparation Date: 29/March/2016
Revision Date: 29/March/2016
### Section 10: Stability and Reactivity

**Reactivity**
- Non-reactive under normal handling and storage conditions.

**Chemical stability**
- Stable

**Possibility of hazardous reactions**
- Hazardous polymerization will not occur. May form combustible dust concentrations in the air. This material is extremely sensitive to ignition.

**Conditions to avoid**
- High temperatures and constant exposure to sunlight. Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

**Incompatible materials**
- Heat, sparks, open flame, strong oxidizing agents, strong reducing agents.

**Hazardous decomposition products**
- Thermal decomposition may produce toxic vapors and/or gases.

### Section 11 - Toxicological Information

**Information on toxicological effects**

<table>
<thead>
<tr>
<th>CAS</th>
<th>Acute Toxicity</th>
<th>Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td>Ingestion/Oral-Rat, adult female LD50 • 99.2 mg/kg; Ingestion/Oral-Rat, adult male LD50 • 874 mg/kg; Inhalation-Rat, adult female LC50 • 0.045 mg/L 4 Hour(s); Inhalation-Rat, adult male LC50 • 0.087 mg/L 4 Hour(s); Skin-Rabbit LD50 • &gt;2020 mg/kg;</td>
<td>Eye-Rabbit • Mild irritation; Skin-Rabbit • Essentially non-irritating</td>
</tr>
</tbody>
</table>

**GHS Properties**

<table>
<thead>
<tr>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation 1; Acute Toxicity - Oral 3</td>
</tr>
<tr>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>OSHA HCS 2012 • Eye Mild Irritation 2B</td>
</tr>
<tr>
<td>Potential Health Effects</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
</tr>
<tr>
<td><strong>Skin</strong></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
</tr>
<tr>
<td><strong>Eye</strong></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
</tr>
<tr>
<td><strong>Other</strong></td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
</tr>
<tr>
<td><strong>Mutagenic Effects</strong></td>
</tr>
<tr>
<td><strong>Carcinogenic Effects</strong></td>
</tr>
<tr>
<td><strong>Reproductive Effects</strong></td>
</tr>
</tbody>
</table>

### Section 12 - Ecological Information

#### Toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotenone (8.74%)</td>
<td>83-79-4</td>
</tr>
</tbody>
</table>

#### Persistence and degradability
- Rotenone - soil half life: 3 days.

#### Bioaccumulative potential
- No data available

#### Mobility in Soil
• Rotenone: non-mobile.

Other adverse effects

• No data available.

Potential Environmental Effects

• This material is extremely toxic to fish.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do not allow entry into lakes, streams, ponds, estuaries or oceans.

Packaging waste

• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>DOT</th>
<th>UN 2588</th>
<th>Pesticides, solid, toxic, n.o.s. (Rotenone)</th>
<th>6.1</th>
<th>III</th>
<th>Marine Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMO/IMDG</td>
<td>UN 2588</td>
<td>Pesticides, solid, toxic, n.o.s. (Rotenone)</td>
<td>6.1</td>
<td>III</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>UN 2588</td>
<td>Pesticides, solid, toxic, n.o.s. (Rotenone)</td>
<td>6.1</td>
<td>III</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Special precautions for user

• None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

• No data available

Other information

• The calculated 1-hour acute toxicity for inhalation LC50 = 2.06 mg/L.

  IMO/IMDG • No data available
  IATA/ICAO • No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

• Acute

FIFRA – Pesticide Labeling

DANGER

POISON
Hazard Statements - KEEP OUT OF REACH OF CHILDREN

Precautionary Statements

Hazards to Humans and Domestic Animals

Fatal if inhaled or swallowed. Harmful if absorbed through the skin. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not breathe dust. Use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any N, R, P or HE filter. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

First Aid

Have the product container or label with you when calling a poison control center or physician, or going for treatment. If swallowed: Call a Poison Control Center, physician, or PROSAR at 866-257-4118 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 the Poison Control Center or physician. Do not give anything by mouth to an unconscious or convulsing person. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center, physician, or PROSAR at 866-257-4118 immediately for treatment advice. If in eyes: Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center, physician, or PROSAR at 866-257-4118 for treatment advice. 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 a Poison Control Center, physician, or PROSAR at 866-257-4118 for treatment advice.

Environmental Hazards

This pesticide is extremely toxic to fish, Fish kills are expected at recommended rates. Consult your State Fish and Game Agency before applying this product to public waters to determine if a permit is needed for such an application. Do not contaminate untreated water when disposing of equipment washwaters.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotenone</td>
<td>83-79-4</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 16 - Other Information

Revision Date • 29/March/2016
Last Revision Date • 29/March/2016
Preparation Date • 29/March/2016

Disclaimer/Statement of Liability

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.