

## 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

Composition		
Chemical Name	Identifiers	%
Rotenone	CAS:83-79-4	8.74%
Cube Resins other than rotenone	NDA	13.11%
Other ingredients	NDA	Balance

## 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				
	Result	ACGIH	NIOSH	OSHA
Rotenone (83-79-4)	TWAs	5 mg/m <sup>3</sup> TWA (commercial)	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA

**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.

<b>Section 9 - Physical and Chemical Properties</b>
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**Information on Physical and Chemical Properties**

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

	Powder)		
<b>Volatility</b>			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
<b>Flammability</b>			
Flash Point	Not relevant	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
<b>Environmental</b>			
Octanol/Water Partition coefficient	No data available		

## 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

	CAS	
Prentox Rotenone Fish Toxicant Powder	NDA	<b>Acute Toxicity:</b> 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 • >2020 mg/kg; <b>Irritation:</b> Eye-Rabbit • Mild irritation; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
<b>Acute toxicity</b>	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation 1; Acute Toxicity - Oral 3
<b>Skin corrosion/Irritation</b>	OSHA HCS 2012 • Classification criteria not met
<b>Serious eye damage/Irritation</b>	OSHA HCS 2012 • Eye Mild Irritation 2B

<b>Skin sensitization</b>	OSHA HCS 2012 • Skin Sensitizer 1
<b>Respiratory sensitization</b>	OSHA HCS 2012 • Classification criteria not met
<b>Aspiration Hazard</b>	OSHA HCS 2012 • Classification criteria not met
<b>Carcinogenicity</b>	OSHA HCS 2012 • Classification criteria not met
<b>Germ Cell Mutagenicity</b>	OSHA HCS 2012 • Classification criteria not met
<b>Toxicity for Reproduction</b>	OSHA HCS 2012 • Classification criteria not met
<b>STOT-SE</b>	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
<b>STOT-RE</b>	OSHA HCS 2012 • Classification criteria not met

## Potential Health Effects

### Inhalation

- Acute (Immediate)** • Fatal if inhaled. Contact can produce pharyngitis and rhinitis.
- Chronic (Delayed)** • No data available

### Skin

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • No data available.

### Eye

- Acute (Immediate)** • May cause mild irritation. Contact can produce conjunctivitis.
- Chronic (Delayed)** • No data available

### Ingestion

- Acute (Immediate)** • Toxic if swallowed.
- Chronic (Delayed)** • No data available

### Other

- Chronic (Delayed)** • No data available.

### Mutagenic Effects

- Rotenone is not mutagenic.

### Carcinogenic Effects

- No component in this product present at 0.1% or greater is listed by IARC, OSHA or NTP.

### Reproductive Effects

- Rotenone has been tested and does not cause birth defects. Rotenone does not have adverse effects on reproduction.

## Section 12 - Ecological Information

### Toxicity

Components		
Rotenone (8.74%)	83-79-4	<b>Aquatic Toxicity-Fish:</b> 96 Hour(s) LC50 <i>Rainbow Trout</i> 0.00194 mg/L [Acute] NOEC <i>Rainbow Trout</i> 0.00101 mg/L [Chronic] <b>Aquatic Toxicity-Crustacea:</b> NOEC <i>Daphnia magna</i> 0.00125 mg/L [Chronic] 96 Hour(s) EC50 <i>Daphnia magna</i> 0.0037 mg/L [Acute]

### 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

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	UN 2588	Pesticides, solid, toxic, n.o.s. (Rotenone)	6.1	III	Marine Pollutant
IMO/IMDG	UN 2588	Pesticides, solid, toxic, n.o.s. (Rotenone)	6.1	III	Marine Pollutant
IATA/ICAO	UN 2588	Pesticides, solid, toxic, n.o.s. (Rotenone)	6.1	III	Not Applicable

**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**





**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.

Inventory		
Component	CAS	TSCA
Rotenone	83-79-4	No

## Section 16 - Other Information

<b>Revision Date</b>	• 29/March/2016
<b>Last Revision Date</b>	• 29/March/2016
<b>Preparation Date</b>	• 29/March/2016
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