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**Section 1. Product and Company Identification****Product Name** Rotenone**Product ID** R5878**Chemical Name  
(Synonyms)****Supplier** LKT Laboratories, Inc  
545 Phalen Blvd.  
St. Paul, MN 55130 USA  
Ph: 651-644-8424 Fax: 651-644-8357  
www.lktlabs.com - getinfo@lktlabs.com**Emergency Phone #** 1-800-424-9300

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**Section 2. Hazards Identification****GHS Classification** Acute toxicity, Oral (Category 3) - H301  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Specific target organ toxicity - single exposure (Category 3) Respiratory system, H335  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410**GHS Label elements including precautionary statements****Pictogram****Signal word** Danger**Hazard and  
precautionary statements****Hazard statements**H301 - Toxic if swallowed.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.  
H410 - Very toxic to aquatic life with long lasting effects.**Precautionary statements**P261 - Avoid breathing dust, fumes, gas, mist, vapors and spray.  
P264 - Wash skin thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P280 - Wear eye protection and face protection.  
P280 - Wear protective gloves.  
P301 + P310 + P330 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332 + P313 - If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 - If eye irritation persists: Get medical advice/ attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P391 - Collect spillage.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/ container to an approved waste disposal plant.**HMIS Classification**Health hazard: 2  
Chronic health hazard: \*  
Flammability: 0  
Physical hazard: 0**NFPA Rating**Health hazard: 2  
Fire hazard: 0  
Activity hazard: 0**Potential Health Effects**Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.  
Skin: May be harmful if absorbed through skin. Causes skin irritation.  
Eyes: Causes serious eye irritation.

Ingestion: Acute toxicity. Toxic if swallowed.

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### Section 3. Composition/Information on Ingredients

#### Substances

**Formula**  $C_{23}H_{22}O_6$   
**CAS No.** 83-79-4

**Formula Wt.** 394.41  
**EC No.** 201-501-9

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### Section 4. First Aid Measures

<b>General advice</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin Contact</b>	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
<b>Inhalation</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Ingestion</b>	Rinse mouth with water. Contact a physician or poison control immediately. Never give anything by mouth to an unconscious person.

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### Section 5 . Firefighting Measures

<b>Flash Point</b>	Not available.
<b>Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Firefighting Procedures</b>	Wear self-contained breathing apparatus and protective clothing for firefighting if necessary.
<b>Unusual Fire Hazards</b>	Carbon oxides.

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### Section 6. Accidental Release Measures

<b>Personal Precautions</b>	Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
<b>Environmental Precautions</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<b>Methods and materials for containment and cleanup</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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### Section 7. Handling and Storage

<b>Handling</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.
<b>Storage Conditions</b>	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: Ambient
<b>Hazardous Decomposition Products</b>	Not available.
<b>Other Remarks</b>	Storage class (TRGS 510): Noncombustible, acute toxic Cat. 3 / toxic hazardous materials or hazardous materials causing chronic effects. This product stores ambient.

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## Section 8. Exposure Controls/Personal Protection

### Personal protective equipment EXPOSURE CONTROLS

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### PERSONAL PROTECTIVE EQUIPMENT

**Eye/face protection:** Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full and splash contact - Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min. Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Body Protection:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN) 143 respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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## Section 9. Physical and Chemical Properties

<b>Physical State</b>	Solid powder.	<b>Color</b>	White crystal powder.
<b>Boiling Point</b>	210-220°C at 0.7 hPa (0.5 mmHg)	<b>Volatility</b>	Not available.
<b>Melting Point</b>	159 - 164°C.	<b>Density</b>	Not available.
<b>Solubility</b>	Slightly soluble in water.	<b>pH</b>	Not available.
<b>Flash Point</b>	Not available.	<b>Ignition temperature</b>	Not available.
<b>Lower explosion limit</b>	Not available.	<b>Autoignition temperature</b>	Not available.
<b>Upper explosion limit</b>	Not available.	<b>Vapor pressure</b>	Not available.
<b>Water solubility</b>	Slightly soluble in water.	<b>Odor</b>	Not available.
<b>Partition coefficient: n-octanol/water</b>	log Pow: 4.1	<b>Odor Threshold</b>	Not available.
<b>Relative vapor density</b>	1.270 g/cm3 at 2°C.	<b>Evaporation rate</b>	Not available.

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## Section 10. Stability and Reactivity

**Stability** Stable under recommended storage conditions.

**Materials To Avoid** Strong oxidizing agents.

**Hazardous Decomposition Products** Not available.

**Possibility of hazardous reactions** Not available.

**Conditions to avoid** Air or light.

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## Section 11. Toxicological Information

**Oral LD50** LD50 Oral - Rat - 60 mg/kg

**Skin corrosion/irritation** Not available.

**Inhalation LC50** Not available.

**Serious eye damage/irritation** Not available.

**Dermal LD50** LD50 Dermal - Rabbit - > 1,000 mg/kg

**Respiratory or skin sensitization** Not available.

**Other information on acute toxicity** Not available.

**Germ cell mutagenicity** Not available.

**Reproductive Toxicity** Not available.

**Aspiration Hazard** Not available.

**Specific organ toxicity single exposure (GHS)** Not available.

**Synergistic effects** Not available.

**Specific organ toxicity repeated exposure (GHS)** Not available.

**Additional Information** RTECS: Not available.

**Teratogenicity** Not available.

**Signs and symptoms of exposure** Vomiting, diarrhea, convulsions, central nervous system depression. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Stomach - irregularities - Based on human evidence.

**Potential Health Effects** Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.  
Skin: May be harmful if absorbed through skin. Causes skin irritation.  
Eyes: Causes serious eye irritation.  
Ingestion: Acute toxicity. Toxic if swallowed.

**Carcinogenicity** This product is or contains a components that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP or EPA classification.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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## Section 12. Ecological Information

**Toxicity** Fish: LC50 - Carissilus auratus (goldfish) - 0.41 - 0.6 mg/l - 96.0 h. Toxicity to daphnia and other aquatic vertebrates  
EC50 - Daphnia pulex (Water flea) - 0.074 - 0.134 mg/l - 48 h.

**Mobility in soil** Not available.

**PBT and vPvB assessment** PBT/vPvB assessment not available as chemical safety assessment not required/ not

conducted.

**Persistence and degradability** Not available.

**Other adverse effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

**Bioaccumulative potential** Lepomis macrochirus - 30 d-5.2 µg/l.  
Bioconcentration factor (BCF): 26

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### Section 13. Disposal Considerations

**Waste Disposal** Dispose of material according to all federal, state and local regulations.  
Offer material to a licensed, professional waste disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

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### Section 14. Transport Information

**DOT (US)** UN number: 2811 Class: 6.1 Packing group: III  
Proper shipping name: Toxic solids, organic, n.o.s. (Rotenone)  
Reportable quantity (RQ) Marine pollutant: yes Poison inhalation hazard: No

**IATA** UN number: 2811 Class: 6.1 Packing group: III  
Proper shipping name: Toxic solid, organic, n.o.s. (Rotenone)

**IMDG** UN number: 2811 Class: 6.1 Packing group: III EMS No.: F-A, S-A  
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Rotenone)  
Marine pollutant: yes

#### Further Information

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### Section 15. Regulatory Information

**Reach No.**

**SARA 302 Components** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Components** Acute health hazard and chronic health hazard.

**Massachusetts Right To Know Components** Rotenone CAS #: 83-79-4 Revision Date: 1991-07-01

**Pennsylvania Right To Know Components** Rotenone CAS #: 83-79-4 Revision Date: 1991-07-01

**New Jersey Right To Know Components** Rotenone CAS #: 83-79-4 Revision Date: 1991-07-01

**California Prop 65 Components** This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

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### Section 16. Other Information

**Other information** The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.

**Updated** 6/28/2019

For emergencies in the USA, call  
CHEMTREC 800-424-9300