

# Safety Data Sheet

## Safranin O, Certified C.I. 50240

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Safranin O, Certified C.I. 50240

**Catalog Numbers:** R-110

**Company Identification:** Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

### Section 2 - Hazards Identification

#### GHS Classifications

H318-Serious eye damage/eye irritation: 1

Consists of unknown acute toxicity.

#### Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

#### Hazard Statements:

H318-Causes serious eye damage

#### Precautionary Statements:

P280-Wear eye protection/face protection.

P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310-Immediately call a Poison Center/doctor.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
477-73-6	Safranin O	≥80%

Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical advice.

**Oral Exposure:** If swallowed, get immediate medical advice. Rinse mouth with water.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

**Hazardous Combustion Products:** Carbon oxides, nitrogen oxides, hydrogen chloride gas, irritating fumes and gases.

**Flash Point:** Not available

**Autoignition Temperature:** Not available

**Explosion Limits, Lower:** Not available

**Upper:** Not available

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

## Section 6 - Accidental Release Measures

### **Procedure(s) of Personal Precaution(s):**

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Avoid dust formation.

**Methods for Cleaning up:** Carefully sweep up and containerize for proper disposal. Avoid generating dusty conditions. Provide ventilation. Do not release to the environment. Do not release to drains.

## Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Minimize dust generation and accumulation. Protect from heat. Keep in a tightly closed container. Store in a cool, dry, and well-ventilated area. Keep away from incompatible materials.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

### **Exposure Limits:**

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Safranin O CAS#477-73-6	Not listed	Not listed	Not listed

## Section 9 - Physical and Chemical Properties

**Physical State:** Powder Solid  
**Appearance:** Red-brown  
**Odor:** Odorless  
**Vapor Pressure:** Not available  
**Odor Threshold:** Not available  
**Vapor Density:** Not available  
**pH:** ca.10 at 10g/L at 20°C (68°F)  
**Relative density:** Not available  
**Melting point/freezing point:** Not available  
**Solubility:** Soluble in water  
**Boiling Point:** Not available  
**Flash Point:** Not available  
**Evaporation Rate:** Not available  
**Flammability (solid, gas):** Not available  
**Partition coefficient: n-octanol/water:** Not available  
**Autoignition Temperature:** Not available  
**Decomposition Temperature:** Not available  
**Viscosity:** Not available  
**Specific Gravity/Density:** Not available

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. May decompose if heated.  
**Conditions to Avoid:** Incompatible materials and excess heat. Avoid temperatures above 240°C (464°F). Avoid dust formation.  
**Incompatibilities with Other Materials:** Strong oxidizing agents.  
**Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides, hydrogen chloride gas, irritating fumes and gases

## Section 11 - Toxicological Information

**CAS#477-73-6 Safranin O: RTECS#: SG1623000**  
LDLo (lowest published lethal dose) Oral: 1600 mg/kg (mouse)  
LD50 Intravenous: 28740 ug/kg (rat)  
LD50 Oral: Not available  
LD50 Dermal: Not available  
LC50 Inhalation: Not available

**Carcinogenicity:** Safranin O CAS#477-73-6 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

**Information on the likely routes of exposure:** Routes of entry anticipated: oral, dermal, inhalation, and eye.

**Epidemiology:** Not available.  
**Teratogenicity:** Not available.  
**Reproductive Effects:** Not available.  
**Developmental Effects:** Not available.  
**Neurotoxicity:** Not available.  
**Mutagenicity:** Histidine reversion (Ames). Mutation in bacteria.  
**Specific Target Organ Toxicity, Single Exposure:** Not available.  
**Specific Target Organ Toxicity, Repeated Exposure:** Not available.

**Symptoms associated with exposure:** Overexposure may cause respiratory stimulation. Oral exposure may cause damage, mucosal irritation. Eye exposure may cause serious damage and irritation. No other specific data is available.

**The toxicological properties of this material have not been thoroughly investigated.**

#### Section 12 - Ecological Information

**Ecotoxicity:** Do not release to the environment. Do not release to drains.

**Persistence and degradability:** Not available.  
**Bio-accumulative potential:** Not available.  
**Mobility:** Not available.

#### Section 13 - Disposal Considerations

**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

#### Section 14 - Transport Information

**DOT**  
Non-Regulated

#### Section 15 - Regulatory Information

#### Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information
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**SDS Creation Date:** 10-15-12

**Revision #1:** RC 11-19-14

**Revision #2:** 12-8-23

**Revision #3:** 6-2-25

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