



# UNISOURCE CHEMICALS PRIVATE LIMITED

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## SAFRANINE O CERTIFIED

### Material Safety Data Sheet

#### **1. PRODUCT IDENTIFICATION:**

**Synonyms:** 2,8-Dimethylphenosafranin; 3,7-Dianino-2,8-dimethyl-5-phenylphenazinium chloride; Phenazinium, 3,7-diamino-2,8-dimethyl-5-phenyl, chloride; C.I.50240; Basic Red 2.

**CAS No.:** 477-73-6.

**Molecular Weight:** 350.84.

**Chemical Formula:** C<sub>20</sub>H<sub>19</sub>CIN<sub>4</sub>.

#### **2. COMPOSITION / INFORMATION ON INGREDIENTS:**

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Percent</u>	<u>Hazardous</u>
Safranin O	477-73-6	95%	No

#### **3. HAZARDS IDENTIFICATION:**

##### **Emergency Overview**

**Appearance:** Red-brown - brown - green powder. Eye contact may result in permanent eye damage.

**WARNING!** Causes eye and skin irritation. Causes respiratory tract irritation. Irritant.

**Target Organs:** Eyes, skin.

##### **Potential Health Effects**

**Eyes:** This product contains a cationic dye. Similar dyes have caused permanent injury to the cornea and conjunctiva in documented exposure cases with human or rabbit eyes.

**Skin:** Causes skin irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Can produce delayed pulmonary edema.

**Chronic:** Effects may be delayed.

#### **4. FIRST AID MEASURES:**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. **Do Not** induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## **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. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** not applicable.

**Auto-ignition Temperature:** Not applicable.

**Explosion Limits, Lower/Upper:** Not available.

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

## **6. ACCIDENTAL RELEASE MEASURES:**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

## **7. HANDLING AND STORAGE:**

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Keep container tightly closed. Do not get on skin or in eyes. Wash clothing before reuse. Avoid breathing dust.

**Storage:** Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION:**

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### **Exposure Limits**

<b><u>Chemical Name</u></b>	<b><u>ACGIH</u></b>	<b><u>NIOSH</u></b>	<b><u>OSHA-Final PELs:</u></b>
Safranine O	None listed	None listed	None listed

**OSHA Vacated PELs:** Safranine O: No OSHA Vacated PELs are listed for this chemical.

## **9. PHYSICAL AND CHEMICAL PROPERTIES:**

**Physical State:** Powder.

**Appearance:** Red- brown – brown - green.

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** Negligible.

**Vapor Density:** Not available.

**Evaporation Rate:** Negligible.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** Not available.

**Specific Gravity/Density:** 1.005 g/cm<sup>3</sup>.

## **10. STABILITY AND REACTIVITY:**

**Chemical Stability:** Stable. However, may decompose if heated.

**Conditions to Avoid:** Excess Heat, temperatures above 240 C.

**Incompatibilities with other Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Hydrogen chloride, carbon monoxide, oxides of nitrogen, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

### **11. TOXICOLOGICAL INFORMATION:**

**RTECS#:** CAS# 477-73-6: SG1623000.

**LD50/LC50:** Not available.

**Carcinogenicity:** CAS# 477-73-6: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.

**Mutagenicity:** See actual entry in RTECS for complete information.

**Other Studies:** No data available.

### **12. ECOLOGICAL INFORMATION:**

**Environmental Fate:** No information available.

**Environmental Toxicity:** No data available.

### **13. DISPOSAL CONSIDERATIONS:**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

### **14. TRANSPORT REGULATIONS:**

Not regulated.

### **15. REGULATORY INFORMATION:**

#### **US FEDERAL**

**TSCA CAS# 477-73-6** is listed on the TSCA inventory.

**Health & Safety Reporting List** None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rule** None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b** None of the chemicals in this product are listed under TSCA Section 12b.

**TSCA Significant New Use Rule** None of the chemicals in this material have a SNUR under TSCA.

#### **SARA**

**Section 302 (RQ)** None of the chemicals in this material have an RQ.

**Section 302 (TPQ)** None of the chemicals in this product have a TPQ.

**SARA Codes** CAS# 477-73-6: immediate, reactive.

**Section 313** No chemicals are reportable under Section 313.

**Clean Air Act:** This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:** None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:** None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE** CAS# 477-73-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

**EUROPEAN/INTERNATIONAL REGULATIONS**  
**European Labeling in Accordance with EC Directives**  
**Hazard Symbols: XI**

**Risk Phrases:** R 36/38 Irritating to eyes and skin.  
**Safety Phrases:** S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)** CAS# 477-73-6; No information available.  
**Canada - DSL/NDSL** CAS# 477-73-6 is listed on Canada's DSL List.  
**Canada - WHMIS** This product has a WHMIS classification of D2B.  
**Canadian Ingredient Disclosure List**  
**Exposure Limits**

**16. DISCLAIMER INFORMATION:**

**DISCLAIMER:**

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