



**PhytoTechnology
Laboratories®**

SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Safranin O
PRODUCT NUMBER: S7400
COMPANY INFO: *PhytoTechnology Laboratories®*
PO Box 12205, Shawnee, KS 66282-2205
Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442
www.phytotechlab.com

EMERGENCY PHONE NUMBER: 1-800-535-5053 - US Only
1-352-323-3500 - International

RECOMMENDED USE: For Research Use Only

RESTRICTIONS ON USE: Products sold by PhytoTechnology Laboratories are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

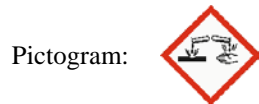
2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification:

H318 - Serious eye damage (Category 1)

GHS Label Element:



Signal Word: **Danger**

Hazard Statements: H318 - Causes serious eye damage.

Precautionary Statements:

P280 – Wear protective gloves/ 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 or doctor/physician.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Basic Red 2; Cotton Red; Gossypimine; Safranin T; C.I. 50240; 3,7-Diamino-2,8-dimethyl-5-phenylphenazinium chloride; Safranine
CAS No: 477-73-6
Formula: C₂₀H₁₉CIN₄
Molecular Weight: 350.84
EC No.: 207-518-8

| Ingredient | CAS Number | Percent | Hazardous |
|------------|------------|---------|---|
| Safranin O | 477-73-6 | 100% | No exposure limits established by OSHA or ACGIH |

4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

| Route of Entry | Symptoms | First Aid Procedures |
|-----------------------|---|--|
| Ingestion | May be harmful if swallowed. | If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention. |
| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation. | Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention. |
| Eye Contact | Direct contact may cause irritation. May cause redness, tearing, or blurred vision. | Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists. |
| Skin Contact | Irritating. May cause reddening, itching or inflammation. May be harmful if absorbed through skin | Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists. |

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

5. FIRE FIGHTING MEASURES

| | |
|---|---|
| Suitable Extinguishing Media: | Water spray, carbon dioxide, dry chemical powder, or alcohol-resistant foam. Use extinguishing media suitable for surrounding fire. |
| Special Protective Equipment and Precaution for Firefighters: | In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance. |
| Hazardous Combustion Products: | May emit toxic fumes under fire conditions. |
| Toxic gas produced: | Carbon oxides, nitrogen oxides (NO _x), Hydrogen chloride gas |

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas.

| | |
|------------------------------------|--|
| Environmental Precautions: | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Method of Containment and Cleanup: | Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let product enter drains. |

7. HANDLING AND STORAGE

| | |
|----------------------------------|--|
| Precaution for Safe Handling: | Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Wash thoroughly after use. |
| Conditions for Safe Storage: | Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. |
| Incompatibilities: | Strong oxidizing agent |
| Recommended Storage Temperature: | Room Temperature |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| | |
|--|---|
| OSHA's Permissible Exposure Limits (PELs): | No data available |
| Threshold Limit Values (TLVs): | No data available |
| Engineering Controls: | Handle in accordance to general industrial hygiene and safety practice. |

Personal Protective Equipment (PPE):

| | |
|-------------------------|--|
| Eye/Face Protection: | Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur. |
| Skin Protection: | Protective gloves |
| Body Protection: | Lab coat |
| Respiratory Protection: | Wear appropriate respirator. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Appearance: | Red to Dark Brown or Green to Black |
| pH: | No data available |
| Solubility: | Water |
| Melting Point: | No data available |
| Freezing Point: | No data available |
| Vapor Density: | No data available |
| Vapor Pressure: | No data available |
| Specific Gravity: | No data available |
| Odor: | No data available |
| Odor Threshold: | No data available |
| Viscosity: | No data available |
| Relative Density: | No data available |
| Evaporation Rate: | No data available |
| Initial Boiling Point and Boiling Range: | No data available |
| Flammability (solid, gas): | No data available |
| Partition coefficient: n-octanol/water): | No data available |
| Auto-ignition Temperature: | No data available |
| Decomposition Temperature: | No data available |
| Flash Point (Closed Cup): | No data available |
| Flammable Limits: | Upper (%) – No data available Lower (%) – No data available |

10. STABILITY AND REACTIVITY

| | |
|-----------------------------------|---------------------------------------|
| Reactivity: | No data available |
| Chemical Stability: | Stable under normal conditions of use |
| Possibility of Hazard Reactions: | Will not occur |
| Conditions to Avoid: | Moisture |
| Incompatibles Materials: | Strong oxidizing agents |
| Hazardous Decomposition Products: | Carbon monoxide, carbon dioxide |

11. TOXICOLOGICAL INFORMATION

| | | |
|------------------|--|-------------------|
| Toxicity: | LD ₅₀ (Oral-Rat)(mg/Kg): | No data available |
| | LD ₅₀ (Oral-Mouse)(mg/Kg): | 1600 mg/kg |
| | LD ₅₀ (Dermal-Rabbit)(mg/Kg): | No data available |
| Carcinogenicity: | NTP: | No |

IARC: Group 3

Z List: No

OSHA Reg: No

Reproductive Toxicity: No data available

Symptoms Associated with Overexposure: No data available

Specific Target Organ Toxicity: Single Exposure: No data available

Repeated Exposure: No data available

Target Organs: Eyes

Medical Conditions Aggravated By Exposure: None identified

Routes of Entry: Inhalation, Ingestion

NIOSH/RTECS No: SG1623000

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic organisms.

Persistence and Degradability: High persistence in water/soil.

Bioaccumulative Potential: Low

Mobility in Soil: Low

Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: No data available

14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A

UN/NA: N/A

Labels: N/A

International:

IMDG: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A

UN/NA: N/A

Labels: N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A

UN/NA: N/A

Labels: N/A

15. REGULATORY INFORMATION

TSCA: No

SARA TITLE III:

Section 302 (EHS) Ingredients: No

Section 313 Ingredients: No

Section 304 (EHS/CERCLA) Ingredients: No

Section 311/312 Hazard: No SARA Hazards

Massachusetts Right to Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components: CAS No.: 477-73-6
3,7-Diamino-2,8-dimethyl-5-phenylphenazinium chloride

New Jersey Right to Know Components: CAS No.: 477-73-6
3,7-Diamino-2,8-dimethyl-5-phenylphenazinium chloride

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.

16. OTHER INFORMATION

| | | | | |
|--------------|----------------------|------------------------------|--------------------------|------------------------|
| HMIS Rating: | Health Hazard | Chronic Health Hazard | Flammability | Physical Hazard |
| | 2 | | 0 | 0 |
| NFPA Rating: | Health Hazard | Fire Hazard | Reactivity Hazard | Special Hazard |
| | 2 | 0 | 0 | |

***PhytoTechnology Laboratories*® provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The above information is intended to be used only as a guide to the appropriate precautionary handling of this material by a properly trained person. *PhytoTechnology Laboratories*® shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

Revision Date: 20 May 15