

# SAFETY DATA SHEET

## SAFRANIN O, 0.1% in 1% Acetic Acid

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Safranin O, 0.1% in 1% Acetic Acid  
**Catalog Numbers:** SO-241, SO-239, L-758-6A  
**Company Identification:** ROWLEY BIOCHEMICAL  
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

H302-Acute toxicity, oral: 4  
H315-Skin corrosion/irritation: 2  
H319-Serious eye damage/eye irritation: 2A

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



Signal Word: Warning

#### Hazard Statements:

H302-Harmful if swallowed  
H315-Causes skin irritation  
H319-Causes serious eye irritation

## Precautionary Statements:

P264-Wash thoroughly after handling.

P270-Do not eat, drink or smoke when using this product.

P280-Wear protective gloves/eye protection/face protection.

P301+P312-If swallowed: Call a Poison Center or doctor/physician if you feel unwell.

P302+P352-If on skin: Wash with plenty of soap and water.

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

P330-Rinse mouth.

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.

P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

## Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
477-73-6	Safranine O	0.1 w/v
64-19-7	Glacial Acetic Acid	1 v/v
7732-18-5	Water	Balance

## 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. Call a physician.

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

**Oral Exposure:** If swallowed, seek immediate medical advice.

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

## Section 5 - Fire Fighting Measures

Firefighters should wear proper protective clothing and self-contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes.

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

**Flash Point:** Not available

**Auto ignition temperature:** Not available

**Explosion Limits:**

**Upper:** Not available

**Lower:** Not available

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

#### Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):** Ventilate area of leak or spill. Remove all sources of ignition. Wear personal protective equipment.

**Methods for Cleaning up:** Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release this material into the environment. Do not release into drains.

#### Section 7 - Handling and Storage

Use care when handling. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Ensure adequate ventilation. Do not ingest or inhale. Wash thoroughly after handling.

Store capped at room temperature in a well-ventilated place. Keep away from incompatible materials.

Note: Acetic acid is extremely destructive to all body tissue. In concentrated form (glacial acetic acid), it is corrosive and flammable. Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Breathing difficulties may occur. Ingestion of concentrated acetic acid causes severe swelling, severe damage to the tissue and danger of perforation. Contact with concentrated acetic acid may cause serious damage to the skin. Eye contact with concentrated acetic acid may cause severe eye damage followed by loss of sight. Exposure to vapor may cause intense watering and irritation to eyes.

#### 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	NIOSH	OSHA - Final PELs
Glacial Acetic Acid	15 ppm STEL 10 ppm TWA	10 ppm TWA 25 mg/m <sup>3</sup> TWA 50 ppm IDLH 15 ppm STEL 37 mg/m <sup>3</sup> STEL	10 ppm TWA 25 mg/m <sup>3</sup> TWA
Safranine O	None listed	None listed	None listed

**OSHA Vacated PELs:** Glacial Acetic Acid: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** not available

**Odor:** not available

**Vapor Pressure:** not available

**Odor threshold:** not available

**Vapor Density:** not available

**pH:** not available

**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 applicable

**Flammability or explosive limits:**

**Upper:** not available

**Lower:** not available

**Partition coefficient: n-octanol/water:** not available

**Auto-ignition temperature:** not available

**Decomposition temperature:** not available

**Viscosity:** not available

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.

**Conditions to Avoid:** Heat, freezing. Incompatible products.

**Incompatibilities with Other Materials:** Strong oxidizing agents, chromic acid, ethylene glycol, perchloric acid, phosphorous trichloride, oxidizers, sodium peroxide, strong caustics, most metals (except aluminum), carbonates, hydroxides, oxides, and phosphates.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas, irritating and toxic fumes.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**Safranine O CAS# 477-73-6: RTECS#:** SG1623000

**LD50/LC50:**

not available

Mutagenicity: Histidine reversion (Ames)

**Carcinogenicity, Safranine O CAS# 477-73-6:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Glacial Acetic Acid CAS# 64-19-7: RTECS#:** AF1225000

**LD50/LC50:**

Glacial Acetic Acid CAS# 64-19-7:

LD50 Oral: 3310 mg/kg (rat)

LC50 Inhalation: 11.4 mg/l (rat) 4h

LC50 Inhalation: 5620 ppm (mouse) 1h

LD50 Dermal: 1,112 mg/kg (rabbit)

Investigated as a mutagen, reproductive effector.

Skin corrosion/irritation: skin (rabbit), causes severe burns

Serious eye damage/eye irritation: eyes (rabbit), corrosive to eyes

Note: Acetic acid is extremely destructive to all body tissue. In concentrated form (glacial acetic acid), it is corrosive and flammable. Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Breathing difficulties may occur. Ingestion of concentrated acetic acid causes severe swelling, severe damage to the tissue and danger of perforation. Contact with concentrated acetic acid may cause serious damage to the skin. Eye contact with concentrated acetic acid may cause severe eye damage followed by loss of sight. Exposure to vapor may cause intense watering and irritation to eyes.

**Carcinogenicity:**

Glacial Acetic Acid CAS# 64-19-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

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

## Section 12 - Ecological Information

**Ecotoxicity:** Do not release to the environment. Do not release into drains. Harmful to aquatic life.

**Safranine O CAS# 477-73-6:** no data available

**Acetic Acid CAS# 64-19-7:**

LC50 freshwater fish: 88 mg/L 96h (Pimephales promelas); 75 mg/L 96h (Lepomis macrochirus)

EC50 water flea: 95 mg/L 24h

**Persistence and Degradability:** If released to water, Acetic Acid is expected to biodegrade. If released to soil, it is expected to biodegrade.

**Bioaccumulation:** No information available.

**Mobility:** Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations
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DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information
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**DOT**

Not regulated

Section 15 - Regulatory Information
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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:** 1/8/2010

**Revision #1:** MH 9/1/15

**Revision #2:** 2-9-23

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