



Material Safety Data Sheet

Safranin Stain

MSDS# 91223

Section 1 - Chemical Product and Company Identification

MSDS Name: Safranin Stain
Catalog Numbers: 23005260, BP2711-1G, BP2711-250, BP2711-4, BP2711-500
Synonyms: Mixture

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases: 11

CAS#: 64-17-5
Chemical Name: Ethyl alcohol
%: 19
EINECS#: 200-578-6
Hazard Symbols: F

Risk Phrases: 11 23/24/25 39/23/24/25

CAS#: 67-56-1
Chemical Name: Methyl alcohol
%: 1
EINECS#: 200-659-6
Hazard Symbols: F T

Risk Phrases:

CAS#: 477-73-6
Chemical Name: Safranin
%: 0.604
EINECS#: 207-518-8
Hazard Symbols:

Risk Phrases:

CAS#: 7732-18-5
Chemical Name: Water
%: <80
EINECS#: 231-791-2
Hazard Symbols:

Hazard Symbols: XI



Risk Phrases: 10 36

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. Causes eye irritation. May cause central nervous system depression. May be absorbed through intact skin. May cause blindness if swallowed. May cause liver and kidney damage. May cause skin and respiratory tract irritation. Target Organs: Central nervous system, liver, eyes.

Potential Health Effects

- Eye:** Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. Vapors may cause eye irritation. May cause painful sensitization to light.
- Skin:** May cause skin irritation. May be absorbed through the skin in harmful amounts.
- Ingestion:** May cause systemic toxicity with acidosis. May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.
- Inhalation:** May cause respiratory tract irritation. May cause liver and kidney damage. May cause narcotic effects in high concentration. May cause drowsiness, unconsciousness, and central nervous system depression.
- Chronic:** Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation may cause effects similar to those of acute inhalation.

Section 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. Rinse area with large amounts of water for at least 15 minutes.
- Ingestion:** Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
- Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Notes to Physician:**

Section 5 - Fire Fighting Measures

- General Information:** If breathing is difficult, give oxygen. 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. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated. Runoff from fire control or dilution water may cause pollution. Flammable liquid and vapor.
- Extinguishing Media:** Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or chemical foam. Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature: Not available

Flash Point: 27.8 deg C (82.04 deg F)

Explosion Limits: Lower: 3.3

Explosion Limits: Upper: 19

NFPA Rating: health: 2; flammability: 3; instability: 0;

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Provide ventilation.

Section 7 - Handling and Storage

Handling:	Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.
Storage:	Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ethyl alcohol	1000 ppm	1000 ppm TWA; 1900 mg/m3 TWA 3300 ppm IDLH (10% LEL)	1000 ppm TWA; 1900 mg/m3 TWA
Methyl alcohol	200 ppm; 250 ppm STEL; Skin - potential significant contribution to overall exposure by the cutaneous route	200 ppm TWA; 260 mg/m3 TWA 6000 ppm IDLH	200 ppm TWA; 260 mg/m3 TWA
Safranin	none listed	none listed	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: Ethyl alcohol: 1000 ppm TWA; 1900 mg/m3 TWA Methyl alcohol: 200 ppm TWA; 260 mg/m3 TWA Safranin: None listed Water: None listed

Engineering Controls:

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.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: red

Odor: pungent odor

pH: Not available

Vapor Pressure: 40 mm Hg @19 deg C

Vapor Density: 1.59 (air=1)

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 95 deg C (203.00°F)

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: Soluble

Specific Gravity/Density: 1

Molecular Formula:

Molecular Weight:

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Ignition sources, excess heat.

Incompatibilities with Other Materials: Not available

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

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 64-17-5: KQ6300000
CAS# 67-56-1: PC1400000
CAS# 477-73-6: SG1623000
CAS# 7732-18-5: ZC0110000
RTECS:
CAS# 64-17-5: Draize test, rabbit, eye: 500 mg Severe;
Draize test, rabbit, eye: 500 mg/24H Mild;
Draize test, rabbit, skin: 20 mg/24H Moderate;
Inhalation, mouse: LC50 = 39 gm/m3/4H;
Inhalation, rat: LC50 = 20000 ppm/10H;
Oral, mouse: LD50 = 3450 mg/kg;
Oral, rabbit: LD50 = 6300 mg/kg;
Oral, rat: LD50 = 7060 mg/kg;
Oral, rat: LD50 = 9000 mg/kg;

LD50/LC50: RTECS:
CAS# 67-56-1: Draize test, rabbit, eye: 40 mg Moderate;
Draize test, rabbit, eye: 100 mg/24H Moderate;
Draize test, rabbit, skin: 20 mg/24H Moderate;
Inhalation, rabbit: LC50 = 81000 mg/m3/14H;
Inhalation, rat: LC50 = 64000 ppm/4H;
Oral, mouse: LD50 = 7300 mg/kg;
Oral, rabbit: LD50 = 14200 mg/kg;
Oral, rat: LD50 = 5600 mg/kg;
Skin, rabbit: LD50 = 15800 mg/kg;

RTECS:
CAS# 477-73-6:
RTECS:
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;

Carcinogenicity: Ethyl alcohol - IARC: Group 1 carcinogen
Methyl alcohol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Safranin - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: ALCOHOLS, N.O.S. (Ethanol, Methanol)

Hazard Class: 3

UN Number: UN1987

Packing Group: III

Canada TDG

Shipping Name: ALCOHOLS, N.O.S. (Ethanol, Methanol)

Hazard Class: 3

UN Number: UN1987

Packing Group: III

USA RQ: CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 10 Flammable.

R 36 Irritating to eyes.

Safety Phrases:

S 7 Keep container tightly closed.

S 16 Keep away from sources of ignition - No smoking.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)

CAS# 64-17-5: 0

CAS# 67-56-1: 1

CAS# 477-73-6: Not available

CAS# 7732-18-5: Not available

Canada

CAS# 64-17-5 is listed on Canada's DSL List

CAS# 67-56-1 is listed on Canada's DSL List

CAS# 477-73-6 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: B2, D2B, D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 64-17-5 is listed on Canada's Ingredient Disclosure List

CAS# 67-56-1 is listed on Canada's Ingredient Disclosure List

CAS# 477-73-6 is not listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 64-17-5 is listed on the TSCA Inventory.

CAS# 67-56-1 is listed on the TSCA Inventory.

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

CAS# 7732-18-5 is listed on the TSCA
Inventory.

Section 16 - Other Information

MSDS Creation Date: 4/16/1999

Revision #14 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
