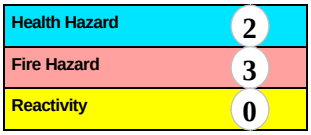
GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
		
		See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**Safranin 1%, Alcoholic Solution**
Manufacturer	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248
Commercial Name(s)	Not available.
Synonym	Not available.
Chemical Name	Safranin 1%, Alcoholic Solution
Chemical Family	Aliphatic alcohol or glycol. (Solvent.)
Chemical Formula	Not applicable.
Supplier	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

Catalog Number(s).	S-095
CAS#	Mixture.
RTECS	Not applicable.
TSCA	TSCA 8(b) inventory: Safranine O; Ethanol
CI#	Not applicable.

IN CASE OF EMERGENCY
CHEMTREC (24hr) 800-424-9300

CALL (310) 516-8000

Section 2.Composition and Information on Ingredients

		Exposure Limits			
Name	**CAS #**	**TWA (mg/m³)**	**STEL (mg/m³)**	**CEIL (mg/m³)**	**% by Weight**
1) Safranine O	477-73-6				1
2) Ethanol	64-17-5	1880			99

Toxicological Data on Ingredients

Ethanol:
ORAL (LD50): Acute: 7060 mg/kg [Rat]. 3450 mg/kg [Mouse]. 6300 mg/kg [Rabbit].
VAPOR (LC50): Acute: 20697.9 ppm 4 hour(s) [Mouse].

Section 3. Hazards Identification

Potential Acute Health Effects

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects

Hazardous in case of eye contact (irritant).
Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [Ethanol].
MUTAGENIC EFFECTS: Classified PROVEN for human [Ethanol].
TERATOGENIC EFFECTS: Classified PROVEN for human [Ethanol].
DEVELOPMENTAL TOXICITY: Classified Development toxin [PROVEN] [Ethanol].
The substance is toxic to blood, kidneys, the nervous system, the reproductive system, liver, heart, upper respiratory tract, skin, eyes.
Repeated or prolonged exposure to the substance can produce target organs damage.

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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
Skin Contact	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.
Ingestion	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Flammable.
Auto-Ignition Temperature	The lowest known value is 363°C (685.4°F) (Ethanol).
Flash Points	The lowest known value is CLOSED CUP: 12.78°C (55°F). OPEN CUP: 13°C (55.4°F). (Cleveland). (Ethanol)
Flammable Limits	The greatest known range is LOWER: 3.3% UPPER: 19% (Ethanol)
Products of Combustion	These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...), halogenated compounds.
Fire Hazards in Presence of Various Substances	Extremely flammable in presence of open flames and sparks, of heat. Slightly flammable to flammable in presence of oxidizing materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.
Special Remarks on Fire Hazards	Containers should be grounded. CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME Vapor may travel considerable distance to source of ignition and flash back. (Ethanol)
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill	Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

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Section 7. Handling and Storage

Precautions	Keep locked up Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes Keep away from incompatibles such as oxidizing agents.
Storage	Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	**Ethanol** TWA: 1000 (ppm) from OSHA (PEL) TWA: 1000 (ppm) from ACGIH (TLV) TWA: 1880 (mg/m^3) from ACGIH TWA: 1000 (ppm) from NIOSH Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	**Odor**	Not available.
Molecular Weight	Not applicable.	**Taste**	Not available.
pH (1% soln/water)	Neutral.	**Color**	Not available.

Boiling Point	The lowest known value is 78.4°C (173.1°F) (Ethanol).
Melting Point	May start to solidify at -114.1°C (-173.4°F) based on data for: Ethanol.
Critical Temperature	Not available.
Specific Gravity	The only known value is 0.789 (Water = 1) (Ethanol).
Vapor Pressure	The highest known value is 40 mm of Hg (@ 20°C) (Ethanol).
Vapor Density	The highest known value is 1.6 (Air = 1) (Ethanol).
Volatility	Not available.
Odor Threshold	The highest known value is 180 ppm (Ethanol)
Water/Oil Dist. Coeff.	Not available.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether.

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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Reactive with oxidizing agents.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	No.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	**WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.** Acute oral toxicity (LD50): 3450 mg/kg [Mouse]. (Ethanol). Acute toxicity of the vapor (LC50): 20697.9 ppm 4 hour(s) [Mouse]. (Ethanol).
Chronic Effects on Humans	**CARCINOGENIC EFFECTS**: Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [Ethanol]. **MUTAGENIC EFFECTS**: Classified PROVEN for human [Ethanol]. **TERATOGENIC EFFECTS**: Classified PROVEN for human [Ethanol]. **DEVELOPMENTAL TOXICITY**: Classified Development toxin [PROVEN] [Ethanol]. The substance is toxic to blood, kidneys, the nervous system, the reproductive system, liver, heart, upper respiratory tract, skin, eyes.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Moderately toxic and narcotic in high concentrations. Experimentaly tumorigen. (Ethanol)

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are more toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available.

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Section 13. Disposal Considerations

Waste Disposal

Section 14. Transport Information

DOT Classification	Class 3: Flammable liquid.
Identification	: Ethanol (Ethanol) : UN1170 PG: II
Special Provisions for Transport	Not available.
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Ethanol
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethanol
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethanol
Pennsylvania RTK: Ethanol
Florida: Ethanol
Minnesota: Ethanol
Massachusetts RTK: Ethanol
New Jersey: Ethanol
New Jersey spill list: Ethanol
TSCA 8(b) inventory: Safranine O; Ethanol

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethanol

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethanol

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications

WHMIS (Canada)

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC)

R11- Highly flammable.
R36- Irritating to eyes.
R46- May cause heritable genetic damage.
R61- May cause harm to the unborn child.

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	3
Reactivity	0
Personal Protection	h

National Fire Protection Association (U.S.A.)

Health
Flammability
Reactivity
Specific hazard

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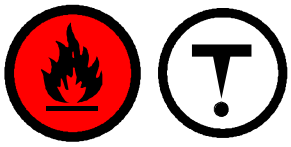
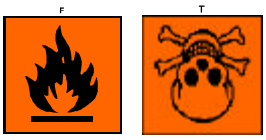
WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Gloves.

Lab coat.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Splash goggles.

Section 16. Other Information

MSDS Code **S095S**

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

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CALL (310) 516-8000

Notice to Reader

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