

Revision Date 2022-04-21

Version 2

## 1. IDENTIFICATION

<b>Product Name</b>	Safranin O Stain Solution
<b>Product Code</b>	SSC1188
<b>Recommended Use</b>	For laboratory, scientific, R&D or manufacturing use.
<b>Company</b>	Cancer Diagnostics, Inc. 116 Page Point Circle Durham, NC 27703 Tel. (877) 846-5393
<b>Emergency Telephone</b>	Call CHEMTREC 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids
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Category 3
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### Label elements

#### **Signal word**

Warning

Flammable liquid and vapor.



#### **Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction.

#### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	>90
Ethyl alcohol	64-17-5	6-10
Safranin O (Basic Red 2)	477-73-6	<1

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>Eye contact</b>	Immediately flush with plenty of water for at least 15 minutes, separating eyelids occasionally. Remove contact lenses if present. Get immediate medical attention.
<b>Skin contact</b>	Wash thoroughly with soap and water while removing contaminated garments. Get medical attention if irritation develops.
<b>Inhalation</b>	Remove to fresh air. Get medical attention for any breathing difficulty.
<b>Ingestion</b>	Do NOT induce vomiting unless instructed to do so by medical personnel. If conscious, rinse mouth and give several glasses of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical attention.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Water spray (fog) Carbon dioxide (CO<sub>2</sub>) Dry chemical Alcohol resistant foam

#### Specific hazards arising from the chemical

No information available.

#### Protective equipment and precautions for firefighters

Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

**NFPA** Health hazards 1 Flammability 2 Instability 0 Physical and Chemical Properties -

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition.
<b>Environmental precautions</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods and material for containment and cleaning up</b>	
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Absorb spill with inert material, scoop up and containerize for disposal.

## 7. HANDLING AND STORAGE

<b>Precautions for safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required
<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.
<b>Incompatible materials</b>	None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering Controls** Emergency showers, eyewash stations, ventilation systems.

### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Red
<b>Odor</b>	No information available
<b>Odor threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting point / freezing point</b>	No information available
<b>Boiling point / boiling range</b>	No information available
<b>Flash point</b>	46 C
<b>Evaporation rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	No information available
<b>Water solubility</b>	Miscible with water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available

Kinematic viscosity No information available

## 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Conditions to avoid** Extremes of temperature and direct sunlight.

**Incompatible materials** None known based on information supplied.

**Hazardous Decomposition Products** None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Inhalation** No data available.

**Eye contact** No data available.

**Skin contact** No data available.

**Ingestion** No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Ethyl alcohol 64-17-5	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** This chemical does not contain any carcinogens or potential carcinogens as listed by ACGIH, OSHA, IARC or NTP

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethyl alcohol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Ethyl alcohol	-0.32

64-17-5

**Other adverse effects** No information available**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.**Contaminated packaging** Do not reuse container. Emptied containers may contain residue. Continue to follow label warnings after container is emptied.

Chemical Name	California Hazardous Waste Status
Ethyl alcohol 64-17-5	Toxic Ignitable

**14. TRANSPORT INFORMATION**

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CFR §173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

**DOT**

<b>UN/ID no.</b>	UN 1170
<b>Proper shipping name</b>	Ethanol solutions
<b>Hazard Class</b>	3
<b>Packing Group</b>	III

**IATA**

<b>UN/ID no.</b>	UN 1170
<b>Proper shipping name</b>	Ethanol solutions
<b>Hazard Class</b>	3
<b>Packing Group</b>	III

**15. REGULATORY INFORMATION****US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and

Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Ethyl alcohol - 64-17-5	Carcinogen Developmental

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Ethyl alcohol 64-17-5	X	X	X

## 16. OTHER INFORMATION

**Prepared By**  
**Revision Date**  
**Disclaimer**

CDI Regulatory Affairs (Email: [compliance@cancerdiagnostics.com](mailto:compliance@cancerdiagnostics.com))  
2022-04-21

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**End of Safety Data Sheet**