

## **MATERIAL SAFETY DATA SHEET**

### **FLUORESCEIN SODIUM 98.5%** **(C.I.NO.45350) (Uranin)** **MSDS CAS: 518-47-8**

#### **Section 1: Chemical Product and Company Identification**

##### **Section 1: Chemical Product**

**Product Name: FLUORESCEIN SODIUM**

**CAS#: 518-47-8**

**Synonym: Fluorescein, disodium; Fluorescein, disodium salt;  
C.I. Acid Yellow 73; Fluorescein, water soluble; Spiro[isobenzofuran-  
1(3H),9'-[9H]xanthen]3-one, 3',6'-dihydroxy-, disodium salt; Uranine**

**Chemical Name: Fluorescein Sodium**

**Chemical Formula: C<sub>20</sub>H<sub>10</sub>O<sub>5</sub>Na<sub>2</sub>**

**Brand: OXFORD**

##### **Details Of The Supplier Of The Safety Data Sheet :**

**Company identification: OXFORD LAB FINE CHEM LLP**  
**Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,**  
**Navghar, Vasai (East). Palghar - 401 210.**  
**Mumbai, Maharashtra, INDIA.**  
**Tel: 91-250-2390989**  
**Tel/Fax: 91-250-2390032**

#### **Section 2: Composition and Information on Ingredients**

##### **Composition:**

| Name                      | CAS #    | % by Weight |
|---------------------------|----------|-------------|
| Fluorescein Complexone AR | 518-47-8 | 100         |

**Toxicological Data on Ingredients: Fluorescein sodium: ORAL (LD50): Acute: 6721 mg/kg [Rat]. 4738 mg/kg [Mouse].**

## Section 3: Hazards Identification

### Potential Acute Health Effects:

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

### Potential Chronic Health Effects:

**CARCINOGENIC EFFECTS:** Not available. **MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Classified Reproductive system/toxin/female [POSSIBLE]. Repeated or prolonged exposure is not known to aggravate medical condition.

## Section 4: First Aid Measures

### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

### Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** CLOSED CUP: Higher than 93.3°C (200°F).

**Flammable Limits:** Not available.

**Products of Combustion:**

These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**Fire Hazards in Presence of Various Substances:**

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**

Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** As with most organic solids, fire is possible at elevated temperatures.

**Special Remarks on Explosion Hazards:**

Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

## Section 6: Accidental Release Measures

**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## Section 7: Handling and Storage

### Precautions:

Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. 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, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Section 8: Exposure Controls/Personal Protection

### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Personal Protection:

Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust 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: Not available.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid. (Solid powder.)

|                           |                                  |
|---------------------------|----------------------------------|
| <b>Odor</b>               | : Odorless.                      |
| <b>Taste</b>              | : Not available.                 |
| <b>Molecular Weight</b>   | : 376.28 g/mole                  |
| <b>Color</b>              | : Orange (Yellowish red) to Red. |
| <b>pH (1% soln/water)</b> | : Not available.                 |
| <b>Boiling Point</b>      | : Not available.                 |
| <b>Melting Point</b>      | : 315°C (599°F)                  |

## Section 9: Physical and Chemical Properties (Continued)

|                        |                                     |
|------------------------|-------------------------------------|
| Critical Temperature   | : Not available.                    |
| Specific Gravity       | : Not available.                    |
| Vapor Pressure         | : Not applicable.                   |
| Vapor Density          | : Not available.                    |
| Volatility             | : Not available.                    |
| Odor Threshold         | : Not available.                    |
| Water/Oil Dist. Coeff. | : Not available.                    |
| Ionicity (in Water)    | : Not available.                    |
| Dispersion Properties  | : See solubility in water.          |
| Solubility             | : Soluble in cold water, hot water. |

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat, excess dust generation, incompatible materials.

**Incompatibility with various substances:** Reactive with oxidizing agents, acids.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Will precipitate with acids.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 4738 mg/kg [Mouse].

## Section 11: Toxicological Information (Continued)

### Chronic Effects on Humans:

**MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.  
**DEVELOPMENTAL TOXICITY:** Classified Reproductive system/toxin/female [POSSIBLE].

### Other Toxic Effects on Humans:

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

Special Remarks on Toxicity to Animals: Not available.

### Special Remarks on Chronic Effects on Humans:

May cause adverse reproductive effects (maternal) based on animal studies. May affect genetic material. May cause cancer (tumorigenic) based on animal studies. May cross the human placenta when applied to eyes as a topical ophthalmic solution. It is excreted in human breast milk when applied to eyes as a topical ophthalmic solution.

### Special Remarks on other Toxic Effects on Humans:

**Acute Potential Health Effects:** Skin: May cause skin irritation. Eyes: Dust may cause eye irritation.  
**Ingestion:** High doses may cause digestive tract irritation including nausea, vomiting. May affect behavior, respiration (dyspnea), cardiovascular system, blood, and sense organs. **Inhalation:** Dust may cause respiratory tract irritation.

## 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 product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

## Section 13: Disposal Considerations

### Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

### Land transport (ADR-RID)

General information: Not regulated.

### Sea transport (IMDG) [English only]

General information: Not regulated.

### Air transport (ICAO-IATA) [English only]

General information: Not regulated.

## Section 15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Fluorescein sodium

Other Regulations: Not available..

### Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): R36/38- Irritating to eyes and skin. R40- Possible risks of irreversible effects. R62- Possible risk of impaired fertility. S2- Keep out of the reach of children. S24/25- Avoid contact with skin and eyes. S36/37- Wear suitable protective clothing and gloves. S46- If swallowed, seek medical advice immediately and show this container or label.

### HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

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

Health: 0

**Regd Office:** Unit no 12, 1st Floor,  
Neminath Industrial Estate No.6,  
Navghar, Vasai (East), Palghar - 410210.  
Maharashtra, INDIA.

**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
info@oxfordlabchem.com  
**Web:** www.oxfordlabchem.com

## Section 15: Other Regulatory Information (Continued)

**Flammability: 0**

**Reactivity: 1**

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

## Section 16 - Additional Information

**References:** Not available.

**Other Special Considerations:** Not available.

### *Disclaimer:*

\*\*\*\*\*

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.