





# Material Safety Data Sheet Fluorescein MSDS

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

Product Name: Fluorescein

Catalog Codes: SLF1135, SLF1645

CAS#: 2321-07-5

RTECS: LM5075000

TSCA: TSCA 8(b) inventory: Fluorescein

CI#: Not available.

Synonym: CI Solvent Yellow 94;

Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3'6'-dihydroxy-; 2-(6-Hydroxy-3-oxo-(3H)-xanthen-9-yl)benzoic acid; D & C Yellow #7; Fluorescein, alcohol soluble.

Chemical Name: Fluorescein
Chemical Formula: C20H12O5

## **Contact Information:**

Sciencelab.com, Inc. 14025 Smith Rd. Houston, Texas 77396

US Sales: 1-800-901-7247 International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

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

#### Composition:

Name	CAS#	% by Weight
Fluorescein	2321-07-5	100

Toxicological Data on Ingredients: Fluorescein LD50: Not available. LC50: Not available.

#### 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:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. 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. 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. 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<sup>1</sup>

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. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

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, CO2).

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

Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

## **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:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

## **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 locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

## **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:

Splash goggles. 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. (Solidcrystalline powder.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 332.31 g/mole Color: Yellow (Yellowish-Red) to Red. pH (1% soln/water): Not applicable.

**Boiling Point:** Not available. **Melting Point:** 315°C (599°F)

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, methanol, acetone.

## Solubility:

Easily soluble in acetone. Soluble in methanol, hot alcohol, glacial acetic acid, alkali hydroxides, and carbonates. Insoluble in cold water, diethyl ether, petroleum ether, benzene.

# 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.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# **Section 11: Toxicological Information**

Routes of Entry: Inhalation. Ingestion.

**Toxicity to Animals:** 

LD50: Not available. LC50: Not available.

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

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:** 

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Causes eye irritation. Ingestion: May cause irritation of the gastrointestinal (digestive) tract. Inhalation: may cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

## 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**

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

## **Section 15: Other Regulatory Information**

## Federal and State Regulations:

TSCA 8(b) inventory: Fluorescein SARA 313 toxic chemical notification and release reporting: Fluorescein

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

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

DSCL (EEC):

R36/38- Irritating to eyes and skin. S24/25- Avoid contact with skin and eyes. S37- Wear suitable gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

**Personal Protection: E** 

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

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

## **Protective Equipment:**

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

## **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

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