

Material Safety Data Sheet

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Version 1.3
According to 91/155/EEC

1 - Product and Company Information

Product Name FLUORESCEIN SODIUM
Product Number F6377

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2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
FLUORESCEIN SODIUM	518-47-8	208-253-0	None
Formula C20H10Na2O5			
Molecular Weight 376.28 AMU			
Synonyms Aizen uranine * Calcocid uranine B4315 *			
9-o-Carboxyphenyl-6-hydroxy-3-isoxanthone,			
disodium salt * Certiqual fluoresceine * C.I.			
766 * C.I. Acid Yellow 73 * C.I. 45350 disodium			
salt * C.I. 45350 sodium salt * D&C Yellow No. 8			
* Disodium 6-hydroxy-3-oxo-9-xanthene-o-benzoate			
* Fluorescein sodium * Fluorescein sodium B.P *			
Fluorescein, soluble * Fluor-I-strip A.T. *			
Ful-Glo * Funduscein * Furanium * Hidacid			
uranine * NCI-C54706 * Resorcinol phthalein			
sodium * Sodium fluorescein * Sodium			
fluoresceinate * Sodium salt of			
hydroxy-o-carboxy-phenyl-fluorone * Soluble			
fluorescein * Soluble fluoresceine *			
Spiro(isobenzofuran-1(3H),9'-(9H)xanthen)-3-one,			
3',6'-dihydroxy-, disodium salt * Uranin *			
Uranine * Uranine A Extra * Uranine O * Uranine			
SS * Uranine USP XII * Uranine WSS * Uranine			
Yellow * 11824 Yellow * 12417 Yellow			

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Not hazardous according to Directive 67/548/EC.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Hygroscopic.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Wear dust mask.

Hand Protection: Protective gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Physical State: Solid	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	N/A	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

10 - Stability and Reactivity

STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: LM5425000

ACUTE TOXICITY

LD50

Oral

Rat

6721 mg/kg

Remarks: Behavioral:Change in motor activity (specific assay).
Behavioral:Ataxia. Lungs, Thorax, or Respiration:Dyspnea.

LD50

Intravenous

Rat

1 GM/KG

Remarks: Blood:Other changes.

LD50
Oral
Mouse
4738 mg/kg

Remarks: Behavioral:Change in motor activity (specific assay).
Behavioral:Ataxia. Lungs, Thorax, or Respiration:Dyspnea.

LD50
Intravenous
Mouse
1 GM/KG

LD50
Intravenous
Dog
1 GM/KG

Remarks: Gastrointestinal:Changes in structure or function of salivary glands.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.

TARGET ORGAN INFORMATION

Kidneys.

CHRONIC EXPOSURE - CARCINOGEN

Rat
Route of Application: Subcutaneous
Exposure Time: 79W
Result: Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application.

Rat
Route of Application: Subcutaneous
Exposure Time: 1Y
Result: Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other: Tumors. Tumorigenic:Tumors at site or application.

CHRONIC EXPOSURE - MUTAGEN

Mouse
200 MG/L
Cell Type: lymphocyte
Mutation in mammalian somatic cells.

Hamster
50100 UG/L
Cell Type: ovary
Sister chromatid exchange

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rabbit

Dose: 933 MG/KG

Route of Application: Intravenous

Exposure Time: (5-8D PREG)

Result: Maternal Effects: Postpartum. Effects on Newborn:

Viability index (e.g., # alive at day 4 per # born alive).

12 - Ecological Information

ECOTOXICOLOGICAL EFFECTS

Test Type: EC50 Daphnia

Species: Daphnia pulex

Time: 48 h

Value: 337 mg/l

Test Type: LC50 Fish

Species: Lepomis macrochirus (Bluegill)

Time: 96 h

Value: 3,433 mg/l

Test Type: LC50 Fish

Species: Onchorhynchus mykiss (Rainbow trout)

Time: 96 h

Value: 1,372 mg/l

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

S-PHRASES: 22 24/25

Do not breathe dust. Avoid contact with skin and eyes.

Not hazardous according to Directive 67/548/EC.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 2

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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