# Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue: 01/06/2022 Version: 0.0

Doc. No: SDS-923.D01/2



# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance

Trade name : FLUORESCEIN SODIUM

EC-No. : 208-253-0 CAS-No. : 518-47-8

Type of product : Pure substance, Hygroscopic substance. Preventive measures apply to the substance in dry

state only

 $Formula \hspace{1.5cm} : \hspace{.1cm} C_{20}H_{10}Na_2O_5$ 

Chemical structure :

Na Na

Synonyms

: 11824 yellow / 12417 yellow / 3',6'-dihydroxyspiroisobenzofuran-1(3hH), 9-(9hH)xanthen)-3-one, Disodium salt / 9-O-carboxyphenyl-6-hydroxy-3-isoxanthone, disodium salt / acid yellow 73 / aizen uranine / aizin uranine / basacid yellow 226 / C.I. 45350 disodium salt / C.I. 45350 sodium salt / C.I. 766 / calcocid uranine B4315 / certiqual fluoresceine / D+C yellow nr 8 / disodium 2-(3-oxo-6-oxidoxanthen-9-yl)benzoate / disodium-6-hydroxy-3-oxo-9-xanthene-O-benzoate / fluorescein sodium / fluorescein sodium BP / fluorescein sodium derivate / fluorescein, disodium salt / fluorescein, sodium salt / fluorescein, soluble / fluorescein, water soluble / fluoresceine, soluble / fluorescein, sodium salt / resorcinol phthalein sodium / sodium fluorescein / sodium fluoresceinate / sodium salt of fluorescein / sodium salt of hydroxy-o-carboxy-phenyl-fluorone / sodiumfluoresceine / soluble fluorescein / soluble fluoresceine / spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-, disodium salt / uranin / uranine A extra / uranine O / uranine SS / uranine USP XII / uranine WSS / uranine yellow / xanthene dye / xanthene dyestuff / yellow 11824 / yellow 12417

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Use of the substance/mixture : Ink: dyestuff

Laboratory chemical

#### 1.2.2. Uses advised against

No additional information available

## 1.3. Details of the supplier of the safety data sheet

ISOLAB Laborgeräte GmbH Am Dillhof 2 - 63863 Eschau / GERMANY Tel: + 49 93 74 / 978 55-0 Fax: +49 93 74 / 978 55-29

prodsafe@isolab.de

# 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Germany	Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG	Hindenburgdamm 30 12203 Berlin	+49 30 19240	

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

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#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

#### Other hazards 2.3.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

# **SECTION 3: Composition/information on ingredients**

#### 3.1. **Substances**

Name	Product identifier	%
FLUORESCEIN SODIUM	(CAS-No.) 518-47-8 (EC-No.) 208-253-0	100

Full text of H-statements; see section 16

#### 3.2. **Mixtures**

Not applicable

# **SECTION 4: First aid measures**

#### Description of first aid measures

First-aid measures general

- : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
- First-aid measures after inhalation
- Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact
- Rinse with water. Soap may be used. Take victim to a doctor if irritation persists. Wash skin with plenty of water.
- First-aid measures after eye contact
- Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Rinse eyes with water as a precaution.
- First-aid measures after ingestion
- Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Call a poison center or a doctor if you feel

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

Symptoms/effects after inhalation : No effects known. Symptoms/effects after skin contact : No effects known. Symptoms/effects after eye contact : Irritation of the eye tissue.

Symptoms/effects after ingestion : AFTER ABSORPTION OF HIGH QUANTITIES: Nausea. Vomiting.

Chronic symptoms : No effects known.

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

### **Extinguishing media**

Suitable extinguishing media : Water. Water spray. Polyvalent foam. AFFF foam. Alcohol-resistant foam. ABC powder.

Carbon dioxide. Water spray. Dry powder. Foam.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

#### Special hazards arising from the substance or mixture 5.2

: DIRECT FIRE HAZARD. Not easily combustible. INDIRECT FIRE HAZARD. Heating increases Fire hazard

the fire hazard.

DIRECT EXPLOSION HAZARD. Fine dust is explosive with air. INDIRECT EXPLOSION Explosion hazard

HAZARD. Dust cloud can be ignited by a spark.

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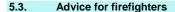
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Hazardous decomposition products in case of

fire

: Toxic fumes may be released.



Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and

windows.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. Do not attempt to take action without

suitable protective equipment. Self-contained breathing apparatus. Complete protective

clothing.

#### **SECTION 6: Accidental release measures**

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

## 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses. Protective clothing. Dust cloud production: compressed air/oxygen

apparatus.

Emergency procedures : Ventilate spillage area. Mark the danger area. Prevent dust cloud formation, e.g. by wetting.

Wash contaminated clothes.

Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and

windows. In case of dust production: no naked flames or sparks.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment

#### 6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply.

Knock down/dilute dust cloud with water spray. Powdered form: no compressed air for pumping

over spills

Methods for cleaning up : Mechanically recover the product. Stop dust cloud by covering with sand/earth. Scoop solid

spill into closing containers. Powdered: do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after

handling

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Comply with

the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Avoid raising dust. Finely divided: keep away from ignition sources/sparks. Powdered form: no compressed air for pumping over. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or

with respiratory protection

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: ignition sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. water/moisture.

Storage area : Store in a dry area. Keep container in a well-ventilated place. Protect against frost. Meet the

legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. watertight. dry. correctly labelled. meet the legal

requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: No data available. MATERIAL TO AVOID: No data available.

# 7.3. Specific end use(s)

No additional information available

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## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protective equipment:

Safety glasses. Gloves.

## Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available

#### Hand protection:

Gloves

#### Eye protection:

Safety glasses. In case of dust production: protective goggles. Protective goggles

#### Skin and body protection:

Protective clothing

#### Respiratory protection:

Dust production: dust mask with filter type P1

Device	Filter type	Condition	Standard
Dust mask	Type P1	Dust protection	







## **Environmental exposure controls:**

Avoid release to the environment.

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Solid. Powder.

Molecular mass : 376.27 g/mol

Colour : Dark red.

Odour : Odourless.

Odour threshold : No data available

pH : No data available
pH solution : No data available
Relative evaporation rate (butylacetate=1) : No data available

Melting point : > 300 °C Freezing point : Not applicable : No data available **Boiling point** Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : > 325 °C Flammability (solid, gas) : Non flammable. Vapour pressure No data available Relative vapour density at 20 °C : No data available

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Relative density : Not applicable
Solubility : Soluble in water.
Water: 50 g/100ml

Water: 50 g/100ml Ethanol: < 0.1 g/100ml

Log Pow : -0.67 (Calculated; 3.35; Calculated)

Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : Not applicable

9.2. Other information

VOC content : 0 %

Other properties : Hygroscopic. Substance has basic reaction.

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Upon combustion: CO and CO2 are formed.

#### 10.2. Chemical stability

Hygroscopic.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

# 10.5. Incompatible materials

Strong acids. Strong bases.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity : Not classified

FLUORESCEIN SODIUM (518-47-8)		
LD50 oral rat	6721 mg/kg (Rat)	
Skin corrosion/irritation	: Not classified	
	pH: 8.3 (1 %)	
Serious eye damage/irritation	: Not classified	
	pH: 8.3 (1 %)	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

# **SECTION 12: Ecological information**

12.1.	Toxicity		
Ecology	- general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.	
Ecology	- air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).	
Ecology	- water	: Maximum concentration in drinking water: 200 mg/l (sodium) (Directive 98/83/EC). Not harmful to fishes (LC50(96h) >1000 mg/l). Slightly harmful to invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l). Insufficient data available on ecotoxicity. Inhibition of activated sludge.	

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FLUORESCEIN SODIUM (518-47-8)		
LC50 fish 1	1372 mg/l (LC50; 96 h)	
EC50 Daphnia 1	337 mg/l (EC50; 48 h)	

#### 12.2. Persistence and degradability

FLUORESCEIN SODIUM (518-47-8)	
Persistence and degradability	Readily biodegradable in water.

### 12.3. Bioaccumulative potential

FLUORESCEIN SODIUM (518-47-8)		
Log Pow	-0.67 (Calculated; 3.35; Calculated)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

# FLUORESCEIN SODIUM (518-47-8)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Product/Packaging disposal recommendations
- Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Dissolve or mix with a combustible solvent. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery.

Additional information

: LWCA (the Netherlands): KGA category 03. Hazardous waste according to Directive 2008/98/EC.

# **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippi	ng name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental ha	azards			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
	No s	upplementary information avai	lable	

# 14.6. Special precautions for user

### - Overland transport

Not applicable

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#### - Transport by sea

Not applicable

#### - Air transport

Not applicable

#### - Inland waterway transport

Not applicable

#### - Rail transport

Not applicable

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

# Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **EU-Regulations** 15.1.1.

No REACH Annex XVII restrictions

FLUORESCEIN SODIUM is not on the REACH Candidate List FLUORESCEIN SODIUM is not on the REACH Annex XIV List

VOC content : 0 %

#### 15.1.2. **National regulations**

#### Germany

VwVwS Annex reference

: Water hazard class (WGK) 1, low hazard to waters

WGK remark

: Internal classification water polluting based on standard worst-case evaluation points due to

insufficient data

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

giftige stoffen - Ontwikkeling

NIET-limitatieve lijst van voor de voortplanting

: The substance is not listed

: The substance is not listed : The substance is not listed

: The substance is not listed

: The substance is not listed

#### **Chemical safety assessment** 15.2.

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

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SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

#### SDS ISOLAB

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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