

# MATERIAL SAFETY DATA SHEET

According to EC Regulation No. 2015/830



Version: 4  
Date of Issue: 25.03.2022  
Revision Date: 25.03.2022

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1 Identification of the product

Substance Name: Fluorescein-5/6-isothiocyanate (5/6-FITC)  
Catalogue No.: AF-0115  
EC No.: 248-207-7  
CAS No.: 27072-45-3  
Index No: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.  
REACH Registration No.: Not known.

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

Identified use: Laboratory chemical, Manufacture of substances  
Uses advised against: Not known.

### 1.3 Detail of the supplier of the safety data sheet

Company: emp Biotech GmbH  
Robert-Roessle-Str. 10  
D-13125 Berlin  
Telefon: +49-30-9489-2201 (Monday-Friday, 9:00 am-5:00 pm)  
Telefax: +49-30-9489-3201  
E-Mail: info@empbiotech.com

### 1.4 Emergency Number

INFOTRAC: +1-352-323-3500 (Phone) or in the US 800-535-5053 (toll-free), 24 hours/day, 7 days/week

## 2. HAZARDOUS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Hazard classes and Hazard categories	Hazard Statements
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Resp. Sens. 1	H334
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(For the full text of the listed hazard classes, hazard categories and hazard statements see section 16)

### 2.2 Label elements

#### Pictograms



GHS08

#### Signal Word

Danger

#### Hazard Statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Precautionary statements

P261 Avoid breathing dust.  
P285: In case of inadequate ventilation wear respiratory protection.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

#### Supplemental Hazard information (EU)

None.

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www.empbiotech.com

Version: 4

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Revision Date: 25.03.2022

## 2.3 Other hazards

None

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Substance Name: 3',6'-dihydroxy-5(or 6)-isothiocyanatospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one

Synonyms: 5/6-Fluoresceinisothiocyanat  
5/6-FITC

Formula: C<sub>21</sub>H<sub>11</sub>NO<sub>5</sub>S

Molecular Weight: 389.4 g/mol

EC No.: 248-207-7

CAS No.: 27072-45-3

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## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**After inhalation:**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**After skin contact:**

Wash off with soap and plenty of water. Consult a physician.

**After eye contact:**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**After swallowing:**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

No data available

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## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Sulphur oxides.

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Additional information

No data available

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## 6. ACCIDENTAL RELEASE MEASURES

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## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Keep container tightly closed in a dry and cool place. Store under inert gas.

Recommended storage temperature: -20 °C. Keep dry.

### 7.3 Specific end uses

A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

No occupational exposure limits established.

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protection equipment

*Respiratory protection:* For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

*Eye protection:* Safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

*Hand protection:* Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

*Skin and body protection:* The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

*Hygiene measures:* When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Keep working clothes separately.

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www.empbiotech.com

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Important health, safety and environmental information

- a) Physical state: dark yellow / solid
- b) Odour: no data available
- c) Odour Threshold: no data available
- d) pH value: no data available
- e) Melting point: no data available
- f) Boiling point: no data available
- g) Flash point: no data available
- h) Evaporation rate: no data available
- i) Flammability (solid, gas): no data available
- j) Explosion limits: lowest – no data available  
highest – no data available
- k) Vapour pressure (20 °C): no data available
- l) Vapour density: no data available
- m) Relative density (20°C): no data available
- n) Solubility in water: not soluble in water
- o) Partition coefficient: no data available  
n-octanol/water
- p) Autoignition temperature: no data available
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available
- t) Oxidizing properties: no data available

### 9.2 Other safety information

No data available.

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Moisture sensitive. Protect material from light, especially in solution!

### 10.5 Incompatible materials

Water, base, amine.

### 10.6 Hazardous decomposition products

Other decomposition products - no data available.  
In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### *Acute toxicity*

No data available

#### *Skin corrosion/irritation*

No data available

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## ***Serious eye damage/eye irritation***

No data available

## ***Respiratory or skin sensitization***

May cause sensitisation by inhalation.

## ***Germ cell mutagenicity***

No data available

## ***Carcinogenicity***

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## ***Reproductive toxicity***

No data available

## ***Specific target organ toxicity - single exposure***

No data available

## ***Specific target organ toxicity - repeated exposure***

No data available

## ***Aspiration hazard***

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## ***Potential health effects***

**Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Ingestion:** No data available

**Skin:** No data available

**Eyes:** No data available

## ***Signs and Symptoms of Exposure***

Repeated exposure cause allergy or asthma symptoms or breathing difficulties if inhaled. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## ***Other information***

RTECS: Not available.

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## **12. ECOLOGICAL INFORMATION**

### **2.1 Toxicity**

No data available

### **12.2 Persistence and degradability**

No data available

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### **12.6 Other adverse effects**

No data available

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## **13. DISPOSAL CONSIDERATIONS**



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