

MATERIAL SAFETY DATA SHEET

According to EC Regulation No. 1907/2006



Version: 1

Date of Issue: 19.03.2014

Revision Date:

www.empbiotech.com

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

1.1 Identification of the product

Substance Name: 6-Carboxyfluorescein NHS ester, single isomer (6-FAM-SE)

Catalogue No.: AF-0106

CAS No.: 92557-81-8

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

Identified use: Laboratory chemical

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

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 [CLP].

Not a hazardous substance or mixture according to EC - directives 67/548/EEC or 1999/45/EC.

2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Main component of the substance

Substance Name: 2,5-Pyrrolidine-dione, 1-[[[3',6'-dihydroxy-3-oxospiro-[isobenzofuran-1(3H), 9'-[9H]xanthen]-6-yl]carbonyl]oxy]-

Synonyms: 6-Carboxyfluorescein N-hydroxysuccinimide ester
6-Carboxyfluorescein, succinimidyl ester, single isomer
6-FAM-NHS, single isomer
6-FAM-SE, single isomer

Formula: C₂₅H₁₅NO₉

Molecular Weight: 473.4 g/mol

CAS No.: 117548-22-8

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.

MATERIAL SAFETY DATA SHEET

According to EC Regulation No. 1907/2006



Version: 1

Date of Issue: 19.03.2014

Revision Date:

www.empbiotech.com

After inhalation:

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

After skin contact:

Wash off with plenty of water.

After eye contact:

Rinse out with plenty of water with the eyelid held wide open (≥10 minutes).

After swallowing:

Rinse out mouth and drink a glass of water. Do not induce vomiting. Seek medical advice immediately and show the container or label. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

CO₂, powder, alcohol-resistant foam, water in large amounts.

Extinguishing media not to be used

No data available

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO_x).

5.3 Advice for firefighters

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus. In order to avoid skin contact, keep a safe distance and wear suitable protection clothing. Mouth respiratory protective device. Wear self-contained respiratory protective device. Wear fully protective suit.

5.4 Additional information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust.

6.2 Environmental precautions

Discharge into the environment must be avoided.

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.

7. HANDLING AND STORAGE

MATERIAL SAFETY DATA SHEET

According to EC Regulation No. 1907/2006



Version: 1

Date of Issue: 19.03.2014

Revision Date:

www.empbiotech.com

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust. In case of dust formation care appropriate exhaust ventilation. Keep containers, equipment and working place clean. Handling corresponding to laboratory safety guidelines.

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

No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protection equipment

Ensure that eyewash stations and safety showers are close to the workstation location. Use with local exhaust ventilation. Prevent vapor buildup by providing adequate ventilation during and after use. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: Respiratory protection not required. Where protection from nuisance levels, use a dust mask type N95 (U.S.) or type P1 (EU EN 143). Use respirators and components must be tested and approved under appropriate government standards such as NIOSH (U.S.) or CEN (EU).

Eye protection: Do not wear contact lenses. Wear as appropriate: Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles or face shield, giving complete protection to eyes.

Hand protection: Solvent-resistant gloves. Gloves must be inspected prior to use. Replace when worn. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374. Due to missing tests no recommendation to the glove material can be given for the product.

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. Remove and wash contaminated clothing before re-use. Do not swallow. Do not breathe vapours or spray mist. Do not get in eyes, on skin, or on clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Important health, safety and environmental information

- | | |
|-------------------------------|-------------------|
| a) Physical state: | orange / 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 |

MATERIAL SAFETY DATA SHEET

According to EC Regulation No. 1907/2006



Version: 1

Date of Issue: 19.03.2014

Revision Date:

www.empbiotech.com

j) Explosion limits:	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: n-octanol/water	no data available
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.

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

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

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

MATERIAL SAFETY DATA SHEET

According to EC Regulation No. 1907/2006



Version: 1

Date of Issue: 19.03.2014

Revision Date:

www.empbiotech.com

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Skin: No known significant effects or critical hazards.

Eyes: No known significant effects or critical hazards.

Signs and Symptoms of Exposure

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

Other information

RTECS numbers (NIOSH): No data available

12. ECOLOGICAL INFORMATION

12.1 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

No data available

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

MATERIAL SAFETY DATA SHEET

According to EC Regulation No. 1907/2006



Version: 1

Date of Issue: 19.03.2014

Revision Date:

www.empbiotech.com

14.2 UN proper shipping name

ADR/RID: Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

14.3 Transport hazard class(es)

ADR/RID:

IMDG:

IATA:

14.4 Packaging group

ADR/RID:

IMDG:

IATA:

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

No data available

16. OTHER INFORMATION

Used abbreviations and acronyms can be looked up under www.wikipedia.de

Additional information

This information is given without any warranty or representation. It is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. emp Biotech GmbH shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification.
