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

### Product identifier

- **Product code**: 46410
- **Product name**: NHS-FLUORESCEIN, 100 MG.
- **Chemical Name**: Not applicable
- **REACH registration number**: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

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

- **Use Description Code**: Not Available
- **Uses advised against**: Not for consumer use.

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

- **Manufacturer/Supplier**
  - LIFE TECHNOLOGIES EUROPE BV
  - KWARTSWEG 2
  - 2665 NN BLEISWIJK
  - NETHERLANDS
  - 31-(0)180 392 400
  - Email: MSDS@lifetech.com
  - Thermo Fisher Scientific
  - Pierce Biotechnology
  - P.O. Box 117
  - Rockford, IL 61105
  - United States
  - 1.815.968.0747 or
  - 1.800.874.3723

- **24 hour Emergency Response**: 866-536-0631
  - 301-431-8585
  - Outside of the U.S. ++1-301-431-8585

- **Country specific Emergency Number (if available)**:
  - CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish)
  - CHEMTREC UK (London) +(44)-870-8200418 (Greeting Language: English)
SECTION 2: Hazards identification

Classification of the substance or mixture

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

**Physical hazards**
Not classified

**Health hazards**
Not classified

**Environmental Hazards**
Not classified

**Additional information**
Not applicable

**Label elements**

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

**Hazard pictograms**
No Pictogram

**Signal word**
None

**hazard statements**
Not applicable

**Precautionary Statements**
Not applicable

**Other Hazards**
This mixture does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>EINECS-No.</th>
<th>Weight percent</th>
<th>REACH registration number</th>
<th>Classification according to Regulation (EC) No 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester</td>
<td>117548-22-8</td>
<td>-</td>
<td>98-100</td>
<td>-</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Product code 46410
Product name NHS-FLUORESCEIN, 100 MG.
SECTION 4: First aid measures

Description of first aid measures

Skin contact
Rinse with plenty of water. Immediate medical attention is not required.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

INGESTION
Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation
Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Notes to Physician
Treat symptomatically.

Most important symptoms and effects, both acute and delayed
Not applicable.

Indication of any immediate medical attention and special treatment needed
None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable Extinguishing Media

Unsuitable Extinguishing Media
No information available.

Special hazards arising from the substance or mixture
Not known.

Advice for fire-fighters
Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

Environmental precautions
No special environmental precautions required.

Methods and material for containment and cleaning up
Take up mechanically, placing in appropriate containers for disposal.

Reference to other sections
See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling
Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities
Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Specific end use(s)
Use as laboratory reagent. Scientific research and development.
## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EU OEL (TWA)</th>
<th>EU OEL (STEL)</th>
<th>EU Skin Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Austria</th>
<th>Belgium (TWA)</th>
<th>Denmark (TWA)</th>
<th>Finland OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>France OEL (VME)</th>
<th>Germany OEL (TWA)</th>
<th>Ireland (TWA)</th>
<th>Italy OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Sweden - Occupational Exposure Limits - TLVs (LLVs)</th>
<th>Netherlands OEL (MAC)</th>
<th>Spain OEL (TWA)</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>European Union</th>
<th>United Kingdom</th>
<th>France OEL (VME)</th>
<th>Germany OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Italy OEL (TWA)</th>
<th>Portugal</th>
<th>Netherlands OEL (MAC)</th>
<th>Finland OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Austria</th>
<th>Denmark</th>
<th>Poland</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Ireland</th>
<th>Norway</th>
<th>Lithuania OEL (TWA)</th>
<th>Spain OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester 117548-22-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Engineering measures

Ensure adequate ventilation, especially in confined areas.

### Exposure controls

#### Personal protection equipment

- **Respiratory protection**: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
- **Hand Protection**: Wear suitable gloves Glove material: Compatible chemical-resistant gloves.
- **Eye protection**: Tight sealing safety goggles.
- **Skin and body protection**: Wear suitable protective clothing.
- **Hygiene measures**: Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls
No special environmental precautions required.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Odour</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting point / melting range</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Flash point</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>°C Mixture has not been tested</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Relative density</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>no data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>no data available</td>
</tr>
<tr>
<td>Partition coefficient:</td>
<td>no data available</td>
</tr>
<tr>
<td>n-octanol/water</td>
<td>no data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Mixture has not been tested</td>
</tr>
<tr>
<td>OTHER INFORMATION</td>
<td>no data available</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

Reactivity
None known.

Chemical stability
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous reaction has not been reported.

Conditions to Avoid
No information available.

Incompatible Materials
No dangerous reaction known under conditions of normal use.

Hazardous decomposition products
no data available.
SECTION 11: Toxicological information

Information on toxicological effects

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 (oral, rat/mouse)</th>
<th>LD50 (dermal, rat/rabbit)</th>
<th>LC50 (inhalation, rat/mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Principle Routes of Exposure, Potential health effects

- **Irritation**: Conclusive but not sufficient for classification
- **Corrosivity**: Conclusive but not sufficient for classification
- **Sensitisation**: Conclusive but not sufficient for classification
- **STOT - Single Exposure**: Conclusive but not sufficient for classification
- **STOT - Repeated Exposure**: Conclusive but not sufficient for classification
- **Carcinogenicity**: Conclusive but not sufficient for classification
- **Mutagenicity**: Conclusive but not sufficient for classification
- **Reproductive toxicity**: Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Freshwater Algae Data</th>
<th>Water Flea Data</th>
<th>Freshwater Fish Species Data</th>
<th>Microtox Data</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

- **Persistence and degradability**: No information available.
- **Bioaccumulative potential**: No information available.
- **Results of PBT and vPvB assessment**: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
- **Other adverse effects**: No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.
SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG
Not classified as dangerous in the meaning of transport regulations.

UN Number       Not applicable
UN proper shipping name Not applicable
Transport hazard class(es) Not applicable
Packing group    Not applicable
Environmental Hazards Not applicable
Special precautions for user Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.
## SECTION 15: Regulatory information

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

#### Substances of Very High Concern

None.

#### Restricted substances under EC 1907/2006, Annex XVII

None.

#### Substances listed under Annex I of Regulation (EC) No 689/2008

None.

#### Restricted substances under Annex V of Regulation (EC) No 689/2008

None.


None.

#### German Water hazard classes (Wassergefährdungsklassen)

Not classified.

### Other International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EINECS (European Union)</th>
<th>ELINCS (European List of Notified Chemical Substances)</th>
<th>ENCS (Japan)</th>
<th>PICCS (Philippines)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>AICS (Australia)</th>
<th>South Korea (KECL)</th>
<th>Canada (DSL)</th>
<th>NDSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-(and-6)-carboxyfluorescein, succinimidyl ester</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Chemical Safety Assessment

No Chemical safety assessment has been carried out.
SECTION 16: Other information

Reason for revision

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

“The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"