1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name: Cyanine3 NHS ester
Catalog number(s): 11020, 21020, 41020, 51020, 61020
Substance name: Cyanine3 NHS ester
Molecular formula: C34H40N3BF4O4
Molecular weight: 641.5
CAS number: 1393427-85-4 (without anion), 1393363-07-9 (chloride)
EC number: N/A
REACH registration number: N/A

1.2. Relevant identified uses of the substance or mixture and uses advised against
Analytical reagent. Reagent for research and development.

1.3. Details of the supplier of the Safety Data Sheet
Supplier: Lumiprobe Corp.
1835 E. Hallandale Beach Blvd. #221
Hallandale Beach
FL 33009
USA
+1 888 9736353
order@lumiprobe.com

Lumiprobe GmbH
Feodor-Lynen-Str. 23
30625 Hannover
Germany
+49 511 16596811
de@lumiprobe.com

1.4. Emergency telephone number
+1 888 973 6353 ext 2; +49 (0)511 16596812

2. Hazards identification

2.1. Classification of the substance or mixture
The substance is not hazardous according to EU regulation (EC) No 1272/2008, and it does not contain any hazardous substance at more than 1% by weight. US Export Control Classification Number (ECCN) - EAR99 - The substance does not require a license.

2.2. Label elements
Not applicable

2.3. Other hazards
No other hazards identified

3. Composition/information on ingredients

3.1. Substances
Product name: Cyanine3 NHS ester
CAS number: 1393427-85-4 (without anion), 1393363-07-9 (chloride)
Weight %: >95 %
3.2. Mixtures
Not applicable.

4. **First aid measures**

4.1. **Description of first aid measures**

<table>
<thead>
<tr>
<th>Condition</th>
<th>First Aid Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>General notes</td>
<td>Wash thoroughly after use.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Move individual to fresh air and seek medical advice.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Wash affected area with water for 15 minutes and seek medical advice if irritation occurs.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Flush eye with water for 15 minutes and seek medical advice if irritation occurs.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Seek medical advice.</td>
</tr>
<tr>
<td>Self-protection of first aider</td>
<td>Wear protective gloves.</td>
</tr>
</tbody>
</table>

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

We are not aware of any reported health hazards for this product.

4.3. **Indication of any immediate medical attention and special treatment needed**

No immediate medical attention or special treatment indicated.

5. **Firefighting measure**

5.1. **Extinguishing media**

Suitable extinguishing media: Depending on the surrounding fire. The substance is not flammable.

Unsuitable extinguishing media: Not known.

5.2. **Special hazards arising from the substance or mixture**

No special fire hazards.

5.3. **Advice for firefighters**

No specific precautions arising from the substance.

6. **Accidental release measures**

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

For non-emergency personnel avoid breathing in dust. Wear gloves and safety glasses.

For emergency responders avoid breathing in dust. Wear gloves and safety glasses.

6.2. **Environmental precautions**

Avoid release into environment and sewage water system.

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

<table>
<thead>
<tr>
<th>Spill Size</th>
<th>Containment and Cleaning Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>Sweep up spilled substance promptly and dispose according to local regulations.</td>
</tr>
<tr>
<td>Large</td>
<td>Avoid dispersal. Sweep up spilled substance promptly and dispose according to local regulations.</td>
</tr>
</tbody>
</table>

6.4. **Reference to other sections**

See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7. Handling and storage

7.1. Precautions for safe handling
Wear protective equipment as specified in section 8.
Do not eat, drink and smoke in work areas. Thoroughly wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities
Storage: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

7.3. Specific end use(s)
Analytical reagent. Reagent for research and development.

8. Exposure controls/personal protection

8.1. Control parameters
No occupational exposure limits known.

8.2. Exposure controls

<table>
<thead>
<tr>
<th>Engineering controls</th>
<th>Work in a fume hood.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal protection</td>
<td>Work in a fume hood with usual precautions.</td>
</tr>
<tr>
<td>Eye/face protection</td>
<td>Wear safety glasses.</td>
</tr>
<tr>
<td>Skin protection</td>
<td>Wear chemical-resistant gloves. Wear a lab coat and appropriate shoes.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Work in a fume hood</td>
</tr>
<tr>
<td>Environmental exposure controls</td>
<td>Do not drain into sewage system</td>
</tr>
</tbody>
</table>

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>red powder</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Substance does not sustain combustion.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non-flammable</td>
</tr>
</tbody>
</table>
### Upper/lower flammability or explosive limits
Not available

### Vapour pressure
Not available

### Vapour density
Not available

### Relative density
Not available

### Solubility(ies)
- Poorly soluble in water (2.3 mM = 1.5 g/L), soluble in organic solvents (DMF, DMSO, dichloromethane)

### Partition coefficient: n-octanol/water
Not available

### Auto-ignition temperature
Not available

### Decomposition temperature
Not available

### Viscosity
Not available

### Explosive properties
Non-explosive

### Oxidising properties
Not available

#### 9.2. Other information
Not applicable

#### 10. Stability and Reactivity

**10.1. Reactivity**
No specific test data available for this substance.

**10.2. Chemical stability**
The product is stable under normal conditions of storage and use.

**10.3. Possibility of hazardous reactions**
No hazardous reactions will occur under normal conditions of storage and use.

**10.4. Conditions to avoid**
No specific data.

**10.5. Incompatible materials**
No specific data.

**10.6. Hazardous decomposition products**
No dangerous decomposition products should be produced under normal conditions of storage and use.

#### 11. Toxicological information
The toxicological properties of this substance have not been thoroughly investigated.

#### 12. Ecological information

**12.1. Toxicity**
No test data available.

**12.2. Persistence and degradability**
12.3. Bioaccumulative potential
No test data available.

12.4. Mobility in soil
No test data available.

12.5. Results of PBT and vPvB assessment
No test data available.

12.6. Other adverse effects
No test data available.

12.7. Additional information
We are not aware of any ecological hazards arising from this substance.

13. Disposal considerations

13.1. Waste treatment methods
Waste should not be disposed of by release to sewers. Consult local, state or national regulations for applicable requirements.

14. Transport Information

14.1. UN number
Not regulated.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
No.

14.6. Special precautions for user
Not available.

14.7 IATA/ICAO
Not regulated.

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
The substance is not listed under relevant regulations.

15.2. Chemical Safety Assessment
No Chemical Safety Assessment has been carried out for this substance by the supplier.

16. Other information
Date of issue/revision 18.03.2019