Section 1: Chemical and Product Identification

1.1 Product Identifiers

Product No.: 1041
Product Name: AFDye 532 NHS Ester
Synonym: Alexa Fluor 532 NHS Ester

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified Uses: Laboratory chemicals, Manufacture of substances

Section 2: Composition/Information on Ingredients

CAS No.: N/A
Mol. Formula: C_{36}H_{26}N_{2}O_{12}S_{3}
Mol. Weight: 774.79
Assay: N/A

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Section 3: Hazards Identification

3.1 Classification of the substance or mixture
Not a hazardous substance or mixture.

3.2 GHS Label elements, including precautionary statements
Not a hazardous substance or mixture.

3.3 Hazards not otherwise classified (HNOC) or not covered by GHS
Not a hazardous substance or mixture.

Section 4: First-Aid Measures

4.1 Description of first aid measures

If inhaled
Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

In case of skin contact
Rinse with plenty of water. If symptoms arise, call a physician.

In case of eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

If swallowed
Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

4.2 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

Section 5: Fire Fighting Measures

5.1 Extinguishing media

5.2 Advice from firefighters
Wear self-contained breathing apparatus and protective suit.

5.3 Further information
No data available

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protection equipment.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material.

6.4 Reference to other sections
See Section 12 for additional information.

Section 7: Handling and Storage

7.1 Precautions for safe handling
Always wear recommended Personal Protective Equipment. No special handling advice required.

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

Section 8: Exposure Controls/Personal Protection

8.1 Exposure Limits
We are not aware of any national exposure limit.

8.2 Engineering measures
Ensure adequate ventilation, especially in confined areas.

8.3 Personal protective equipment
Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Eye/Face protection
Safety glasses with side-shields

Hand protection
Impervious gloves

Skin/Body Protection
Lightweight protective clothing

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice

Respiratory protection
In case of insufficient ventilation wear suitable respiratory equipment.

**Control of Environmental exposure**
Prevent product from entering drains

### Section 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>a) Appearance</td>
<td>No data available</td>
</tr>
<tr>
<td>b) Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>c) Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>d) pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>e) Melting / Freezing points</td>
<td>°C and °F No data available</td>
</tr>
<tr>
<td>f) Initial boiling point &amp;boiling range</td>
<td>°C and °F No data available</td>
</tr>
<tr>
<td>g) Flash point</td>
<td>°C and °F No data available</td>
</tr>
<tr>
<td>h) Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>i) Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>j) Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>k) Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>l) Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>m) Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>n) Solubility</td>
<td>Water, DMSO, DMF</td>
</tr>
<tr>
<td>o) Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>p) Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>q) Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>r) Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>s) Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>t) Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2 Other safety information
No data available.

### Section 10: Stability and Reactivity

#### 10.1 Chemical stability
Stable under normal conditions

#### 10.2 Materials to avoid
No dangerous reaction known under conditions of normal use

#### 10.3 Hazardous decomposition products
None under normal use

#### 10.4 Polymerization
Hazardous polymerization does not occur

### Section 11: Toxicological Information

#### 11.1 Acute toxicology
No data available

Inhalation: No data available
Dermal: No data available

11.2 Skin corrosion / irritation
No data available

11.3 Serious eye damage/eye irritation
No data available

11.4 Respiratory or skin sensitization
No data available

11.5 Germ cell mutagenicity
No data available

11.6 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.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

11.7 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
No data available.

Additional Information
RTECS: Not available.

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

Section 12: Ecological Information

12.1 Toxicity
No information available

12.2 Mobility
No information available
12.3 Persistence and degradability
Inherently biodegradable

12.4 Bio accumulative potential
Does not bioaccumulate

12.5 Other adverse effects
No information available

Section 13: Disposal Considerations

13.1 Waste treatment methods
Dispose of in accordance with local regulations.

Section 14: Transport Information

14.1 IATA
Proper shipping name: Not classified as dangerous in the meaning of transport regulations
Hazard class: None
Subsidiary Class: None
Packing Group: None
UN-No: None

Section 15: Regulatory Information

SARA 313 Components
This product is not regulated by SARA

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain HAPs

California Proposition 65
This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class
Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

Section 16: Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.