

## Section 1: Chemical and Product Identification

### 1.1 Product Identifiers

Product No.: 1121

Product Name: AFDye 647 NHS Ester

Synonym: Alexa Fluor 647 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:  $C_{39}H_{49}N_3O_{16}S_4$

Mol. Weight: 944.07

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**

Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical.

### **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**

a) Appearance	No data available
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	Not Applicable
e) Melting / Freezing points	°C and °F No data available
f) Initial boiling point & boiling range	°C and °F No data available
g) Flash point	°C and °F No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor pressure	No data available
m) Relative density	No data available
n) Solubility	Water, DMSO, DMF
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition 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.

**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**

<b>Proper shipping name</b>	Not classified as dangerous in the meaning of transport regulations
<b>Hazard class</b>	None
<b>Subsidiary Class</b>	None
<b>Packing Group</b>	None
<b>UN-No</b>	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.