

Section 1: Chemical and Product Identification

1.1 Product Identifiers

Product No.: 1061

Product Name: AFDye 405 NHS Ester

Synonym: Alexa Fluor 405 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: $C_{28}H_{26}N_2O_{15}S_3$

Mol. Weight: 726.69

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 (CO₂). 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

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.