

**Material Safety Data Sheet**

Product: Fmoc-Cys(Trt)-OH
MSDS No: AS2487
Revision: 1.0

Section 1 - Product and Company Information

Product Name	Fmoc-Cys(Trt)-OH
Product Code	AS2487
CAS No.	103213-32-7
Company	Alan Scientific Inc. Address: 11749 Split Tree Cir., Potomac, MD 20854 U.S.
EMERGENCY CONTACTS	(888)-757-1116 (Dr. Jason Zhi)

Section 2 - Composition/Information on Ingredients

Substance Name	Fmoc-Cys(Trt)-OH; N-alpha-Fmoc-S-trityl-L-cysteine
CAS No.	103213-32-7
Formula	$C_{37}H_{31}NO_4S$
Molecular Weight	585.71 g/mol

Section 3 - Hazards Identification**Emergency Overview**

Warning. Harmful if swallowed or inhaled. Causes skin irritation and serious eye irritation. May cause respiratory irritation. Avoid breathing dust and use appropriate personal protective equipment.

GHS Hazard Classification

Conservative classification based on current U.S. supplier SDS: Acute toxicity - oral Category 4; Acute toxicity - inhalation Category 4; Skin irritation Category 2; Eye irritation Category 2A; Specific target organ toxicity - single exposure, respiratory irritation Category 3.

GHS Signal Word / Pictogram / Hazard Statements

Signal word: Warning. Pictogram: GHS07 (exclamation mark). Hazard statements: H302, H332, H315, H319, H335.

Classification note

Published supplier SDS classifications differ by jurisdiction and supplier. Merck/MilliporeSigma (2026) lists the substance as not hazardous under its referenced GHS framework, while current U.S. supplier SDS documents classify it as an irritant/acute toxicity Category 4 material. This Alan Scientific SDS uses the more conservative U.S. handling classification.

Section 4 - First Aid Measures**Inhalation**

Move to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if symptoms develop or persist.

Skin contact

Remove contaminated clothing and wash affected skin with soap and copious water.

Eye contact

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if easy to do. Seek medical attention if symptoms persist.

Ingestion

Rinse mouth. Do not induce vomiting. Call a poison center or physician if you feel unwell.

Most important symptoms/effects

No specific symptoms established; toxicological data are limited.



Section 5 - Fire Fighting Measures

Suitable extinguishing media

Water spray or fog, alcohol-resistant foam, dry chemical powder, or carbon dioxide.

Special hazards

Combustion may produce carbon oxides, nitrogen oxides, sulfur oxides, and other irritating fumes.

Protective equipment for firefighters

Wear self-contained breathing apparatus and protective gloves/clothing as appropriate.

Further information

Prevent fire-extinguishing water from entering drains or waterways where practicable.

Section 6 - Accidental Release Measures

Personal precautions

Avoid inhalation of dust and contact with skin and eyes. Use appropriate PPE and adequate ventilation.

Environmental precautions

Do not allow material to enter drains or waterways.

Cleanup methods

Use dry cleanup procedures, avoid generating dust, and collect material into a suitable labeled waste container.

Section 7 - Handling and Storage

Handling

Use good laboratory hygiene. Avoid dust generation and unnecessary exposure. Wash hands thoroughly after handling.

Storage

Keep tightly closed in a cool, dry place at or below 25 C, protected from moisture and incompatible materials. Follow the product label and lot-specific documentation.

Specific end use

Peptide synthesis and research applications only.

Section 8 - Exposure Controls / PPE

Exposure limits

No substance-specific occupational exposure limit identified in the referenced supplier SDS.

Engineering controls

Provide adequate local ventilation when handling powders or crystals.

Eye/face protection

Safety glasses or chemical safety goggles.

Hand protection

Chemical-resistant laboratory gloves such as nitrile gloves; verify compatibility with solvents used.

Respiratory protection

Normally not required under well-controlled conditions. Use suitable particulate protection if dust is generated.



Section 9 - Physical/Chemical Properties	
Physical State	Solid / powder
Appearance	White powder
Molecular Formula	C37H31NO4S
Molecular Weight	585.71 g/mol
Melting Point	170-180 C (Alan Scientific product reference)
Specific Rotation	+20 deg +/- 2 deg (C=1 in DMF)
Solubility in Water	No reliable SDS value established
Flash Point	Not applicable / no data available
Odor	No data available
Section 10 - Stability and Reactivity	
Chemical stability	
Expected to be stable under recommended storage and normal laboratory conditions.	
Conditions to avoid	
Excess heat, moisture, dust accumulation, and incompatible materials.	
Incompatible materials	
Strong oxidizing agents.	
Hazardous decomposition products	
Carbon oxides, nitrogen oxides, and sulfur oxides may form on combustion.	
Section 11 - Toxicological Information	
Acute toxicity	
No quantitative data available.	
Skin corrosion/irritation	
No data available.	
Serious eye damage/irritation	
No data available.	
Sensitization, mutagenicity, carcinogenicity, reproductive toxicity	
No data available.	
Additional information	
The chemical, physical, and toxicological properties have not been thoroughly investigated. Handle in accordance with good laboratory hygiene and safety practices.	



Section 12 - Ecological Information

Ecotoxicity

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

General precaution

Avoid uncontrolled release to the environment.

Section 13 - Disposal Considerations

Waste treatment

Dispose of the chemical and contaminated materials in accordance with applicable federal, state, local, and institutional regulations.

Packaging

Dispose of contaminated packaging as unused product unless otherwise permitted by local regulation.

Section 14 - Transport Information

Hazard Class	N/A in the referenced supplier SDS
Identification Number	N/A
Packing Group	N/A
Proper Shipping Name (DOT)	N/A
ADR/RID	Not identified as dangerous goods in the referenced supplier SDS
IMDG	Not identified as dangerous goods in the referenced supplier SDS
IATA	Not identified as dangerous goods in the referenced supplier SDS

Section 15 - Regulatory Information

California Proposition 65

No specific listing identified in the referenced supplier SDS.

TSCA / CERCLA / SARA

No specific entry identified in the referenced supplier SDS.

Other regulations

Regulatory status varies by jurisdiction and intended use. The user is responsible for determining all applicable requirements.



Section 16 - Other Information

Research Use Only

This product is intended for research and development use only. It is not intended for food, drug, household, agricultural, cosmetic, human diagnostic, veterinary diagnostic, or therapeutic use.

Sources consulted

Alan Scientific product information for Fmoc-Cys(Trt)-OH (AS2487), CAS 103213-32-7; Merck / MilliporeSigma Safety Data Sheet for Fmoc-Cys(Trt)-OH Novabiochem, Product 8.52005; AnaSpec product and SDS information for Fmoc-Cys(Trt)-OH.

DISCLAIMER

The information above is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should independently evaluate handling conditions and applicable regulations.

WARRANTY

The information is based on the present state of knowledge and is applicable to the product regarding appropriate safety precautions. It does not represent any guarantee of product properties. Alan Scientific Inc. shall not be held liable for damage resulting from handling or contact with the above product.