

MATERIAL SAFETY DATA SHEET

Section 1 - Identification

Product identifier	Fmoc- α -Me-Lys(Boc)-OH
Catalog No.	AS2144
Other identifiers	(S)-N α -Fmoc-N ϵ -Boc- α -methyllysine; N6-[(1,1-dimethylethoxy)carbonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-2-methyl-L-lysine
Recommended use	Laboratory research, peptide synthesis, noncanonical amino-acid incorporation and peptide-building-block applications.
Restrictions on use	For research use only. Not for human or veterinary use, therapeutic use, diagnostic use, food, household, or consumer applications.
Responsible party	Alan Scientific Inc.
U.S. address	9031 Shady Grove Court, Gaithersburg, MD 20877 U.S.
Contact	+1 888-757-1116 contactus@alanscientific.com www.alanscientific.com
Emergency telephone	+1 888-757-1116

Section 2 - Hazard(s) Identification

OSHA HCS classification	Not classified as hazardous based on currently reviewed supplier safety information. Chemical and toxicological properties may not be fully characterized.
Signal word	Not applicable.
Hazard statements	No GHS hazard statements assigned in the reviewed supplier SDS.
Pictograms	None assigned.
Precautionary statements	Avoid breathing dust and unnecessary contact with skin and eyes. Use appropriate laboratory ventilation, gloves, protective clothing and eye protection. Wash hands after handling.
HNOC	None known based on currently available information.
Unknown acute toxicity	No numerical acute-toxicity data assigned in this document.

Section 3 - Composition / Information on Ingredients

Substance / mixture	Substance
Chemical name	Fmoc- α -Me-Lys(Boc)-OH
CAS No.	1202003-49-3
Molecular formula	C ₂₇ H ₃₄ N ₂ O ₆
Molecular weight	482.57 g/mol
Purity / concentration	Product-specific; refer to Certificate of Analysis (COA).
Hazard-contributing impurities	No additional hazard-contributing impurities identified in the information reviewed for this MSDS.

Section 4 - First-Aid Measures

Inhalation: Move to fresh air. Obtain medical attention if symptoms occur or persist. Skin contact: Remove contaminated clothing and wash thoroughly with soap and water. Eye contact: Rinse cautiously with water for at least 10-15 minutes; remove contact lenses if present and easy to do. Obtain medical advice if irritation persists. Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Obtain medical advice if unwell. Treat symptomatically and supportively.

Section 5 - Fire-Fighting Measures

Suitable extinguishing media: Use water spray, foam, dry chemical, or carbon dioxide as appropriate for the surrounding fire. Specific hazards: Carbon oxides and nitrogen oxides may form during combustion or thermal decomposition. Firefighter protection: Wear self-contained breathing apparatus and appropriate protective equipment when conditions warrant.

Section 6 - Accidental Release Measures

Avoid dust formation and inhalation. Provide ventilation and use appropriate personal protective equipment. Collect dry material carefully without generating dust and place in a suitable closed container for disposal. Prevent unnecessary release to drains, surface water, or soil.

Section 7 - Handling and Storage

Handle using good laboratory practice. Avoid ingestion, inhalation of dust, and unnecessary contact with skin and eyes. Keep the container tightly closed. Reviewed supplier documentation specifies refrigerated storage at 2-8°C. Protect from contamination and store away from incompatible materials such as strong oxidizing agents. Follow the product label and lot-specific COA when they provide more specific conditions.

Section 8 - Exposure Controls / Personal Protection

Occupational exposure limits	No substance-specific OSHA PEL or ACGIH TLV identified in the information reviewed.
Engineering controls	Use general laboratory ventilation; local exhaust is appropriate where dust is generated.
Eye / face protection	Safety glasses or suitable chemical splash protection.
Skin / body protection	Suitable chemical-resistant gloves and laboratory clothing.
Respiratory protection	Normally not required under controlled handling; if dust is generated and ventilation is insufficient, use an appropriate particulate respirator consistent with site procedures.
Hygiene measures	Wash hands after handling. Do not eat, drink or smoke in chemical handling areas.

Section 9 - Physical and Chemical Properties

Physical state	Solid
Appearance	White powder based on reviewed supplier documentation; lot appearance may vary.
Odor	No data available
pH	No data available
Melting point	No validated Alan Scientific lot-specific value assigned in this MSDS
Boiling point / range	No data available
Flammability	No data available
Flash point	No data available
Vapor pressure	No data available
Density / relative density	No data available
Solubility	Product-specific; consult technical data/COA if available
Partition coefficient	No data available
Molecular weight	482.57 g/mol

Section 10 - Stability and Reactivity

Reactivity: No comprehensive reactivity data available. Chemical stability: No validated product-specific stability study is assigned in this MSDS; the material is intended to be handled under the recommended storage conditions. Hazardous reactions: No hazardous polymerization is known. Conditions to avoid: Excessive heat and conditions inconsistent with recommended storage. Incompatible materials: Strong oxidizing agents. Hazardous decomposition products: Carbon oxides and nitrogen oxides may form during combustion or thermal decomposition.

Section 11 - Toxicological Information

Likely exposure routes	Inhalation of dust, eye contact, skin contact and ingestion.
Acute toxicity	No numerical LD50/LC50 data assigned in the reviewed supplier SDS.
Skin corrosion / irritation	No product-specific classification assigned in the reviewed supplier SDS; avoid contact as a precaution.
Eye damage / irritation	No product-specific classification assigned in the reviewed supplier SDS; avoid contact as a precaution.
Respiratory / skin sensitization	No data available.
Germ cell mutagenicity	No data available.
Carcinogenicity	No product-specific carcinogenicity data identified in the information reviewed.
Reproductive toxicity	No data available.
STOT - single exposure	No data available.
STOT - repeated exposure	No data available.
Aspiration hazard	Not applicable to the supplied solid based on available information.
Additional information	Chemical and toxicological properties may not be fully characterized. Handle using good laboratory safety practice.

Section 12 - Ecological Information

Ecotoxicity: No complete product-specific data available. Persistence / degradability: No data available. Bioaccumulation: No data available. Mobility in soil: No data available. Avoid unnecessary environmental release.

Section 13 - Disposal Considerations

Dispose of product, residues and contaminated packaging in accordance with applicable federal, state and local requirements. Do not mix with incompatible waste streams. Handle uncleaned containers as product residue.

Section 14 - Transport Information

Transport status	Not regulated as dangerous goods based on reviewed supplier information; verify shipment-specific requirements.
UN number	Not assigned.
Proper shipping name	Not assigned.
Hazard class	Not assigned.
Packing group	Not assigned.
Environmental hazards	No transport-specific environmental classification assigned in this document.
Special precautions	Use secure, closed packaging appropriate for laboratory chemicals and verify carrier requirements before shipment.

Section 15 - Regulatory Information

OSHA HCS	Prepared with consideration of the OSHA Hazard Communication Standard (29 CFR 1910.1200); no hazardous classification is assigned here based on currently reviewed supplier information.
Other regulatory considerations	Users and importers are responsible for confirming TSCA, state, local and jurisdiction-specific requirements for the specific transaction and use.

Section 16 - Other Information

Revision	1.0
Date of preparation / revision	2026-09-06
Revision summary	Initial Alan Scientific MSDS for Fmoc- α -Me-Lys(Boc)-OH (AS2144) using the standard 16-section product-document format.
Data / assessment basis	Alan Scientific product information; PubChem identity data; and currently available supplier safety documentation reviewed for identity, storage, physical form, transport and hazard context. Final release should remain aligned with the lot-specific upstream supplier MSDS and COA.

Safety information notice: Information is provided in good faith for safe handling of the supplied research material and is based on information reasonably available as of the revision date. It is not a product specification or warranty. Users are responsible for determining suitability, controls and regulatory obligations for their specific use.