

MOTS-C

Lyophilized research peptide | Document ID: FR-SDS-MOTSC-001

01 IDENTIFICATION

PRODUCT IDENTIFIER	MOTS-C
OTHER IDENTIFIERS	MRWQEMGYIFYPRKLR
CAS NO.	1627580-64-6
RECOMMENDED USE	Laboratory chemicals / research use only
RESTRICTIONS ON USE	Not for human or veterinary diagnostic, therapeutic, prophylactic or dietary use.
RESPONSIBLE PARTY	Fraction Research - [INSERT LEGAL ENTITY NAME]
U.S. ADDRESS	[INSERT U.S. STREET ADDRESS, CITY, STATE, ZIP]
TELEPHONE	[INSERT BUSINESS TELEPHONE]
EMERGENCY TELEPHONE	[INSERT 24-HOUR EMERGENCY NUMBER / CHEMTREC ACCOUNT IF APPLICABLE]

02 HAZARD(S) IDENTIFICATION

REFERENCE CLASSIFICATION	No compound-specific GHS hazard classification is assigned in this reference SDS because the exact manufacturer/importer hazard determination and formulation have not been supplied. Toxicological data are limited. Handle as a potentially hazardous laboratory chemical and reconcile Section 2 to the qualified supplier SDS before distribution.
- Substance-specific occupational toxicology is limited. Avoid ingestion, inhalation of dust, and contact with skin or eyes. - Use adequate ventilation and standard laboratory personal protective equipment. - No pictogram or signal word is assigned in this reference document pending reconciliation to the qualified supplier/manufacturer SDS.	

03 COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE	MOTS-C
CAS NO.	1627580-64-6
MOLECULAR FORMULA	C101H152N28O22S2
MOLECULAR WEIGHT	2174.6 g/mol
CONCENTRATION	[INSERT ACTUAL COMPOSITION / PURITY RANGE FROM SUPPLIER SPECIFICATION]
EXCIPIENTS	[INSERT ALL EXCIPIENTS / BULKING AGENTS IF PRESENT; DO NOT PUBLISH AS PURE SUBSTANCE IF FORMULATED]

04 FIRST-AID MEASURES

- Inhalation: Move person to fresh air and keep comfortable for breathing. Obtain medical advice if symptoms develop or persist.
- Skin contact: Wash with plenty of water and soap. Remove contaminated clothing. Obtain medical advice for persistent irritation.
- Eye contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing; obtain medical attention if irritation persists.
- Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Obtain medical advice if a meaningful exposure is suspected.
- Most important symptoms/effects: Substance-specific human toxicology data are limited; treat irritation, respiratory discomfort, gastrointestinal symptoms or unexpected effects conservatively.

05 FIRE-FIGHTING MEASURES

- Suitable extinguishing media: Use extinguishing media appropriate for the surrounding fire; carbon dioxide, dry chemical, foam or water may be used as conditions warrant.
- Specific hazards: Thermal decomposition may generate irritating or hazardous fumes. Avoid inhalation of combustion products.
- Firefighter protection: Use appropriate protective equipment and self-contained breathing apparatus when conditions require.

06 ACCIDENTAL RELEASE MEASURES

- Avoid dust formation and inhalation. Use appropriate PPE and provide adequate ventilation.
- Prevent material from entering drains or waterways.
- Carefully collect dry material mechanically without generating dust and place in a suitable closed waste container. Clean the affected surface using appropriate laboratory procedures.

07 HANDLING AND STORAGE

- Handle using good laboratory chemical hygiene. Avoid contact with skin, eyes and clothing; avoid generating or inhaling dust.
- Keep container tightly closed, protected from moisture and unnecessary light/heat exposure.
- Store according to the qualified supplier/manufacturer specification. Minimize repeated temperature cycling of lyophilized material.
- For research use only; no clinical or veterinary use is advised or authorized by this document.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS	No compound-specific OSHA PEL or validated occupational exposure limit is established in this reference document.
ENGINEERING CONTROLS	Use adequate local ventilation; a chemical fume hood is appropriate when dust or aerosol generation is possible.
EYE PROTECTION	Safety glasses or chemical splash goggles appropriate to the task.
HAND PROTECTION	Chemical-resistant disposable gloves selected for the task and compatible with other materials in use.
SKIN / BODY	Laboratory coat or other protective clothing appropriate to exposure potential.
RESPIRATORY	Avoid dust/aerosol generation. If adequate ventilation cannot be maintained, use respiratory protection selected under an applicable respiratory-protection program.

09 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Lyophilized research peptide
COLOR	White to off-white commonly reported for peptide research materials; verify actual lot
ODOR	No reliable product-specific value established
MOLECULAR FORMULA	C101H152N28O22S2
MOLECULAR WEIGHT	2174.6 g/mol
MELTING / FREEZING POINT	No reliable product-specific value established in this reference document
WATER SOLUBILITY	Not standardized here; verify the actual material and supplier specification
PH / FLASH POINT / VAPOR PRESSURE	No applicable or reliable product-specific data established for the dry research material

10 STABILITY AND REACTIVITY

- Reactivity: No hazardous polymerization or unusual reactivity is established in this reference document.
- Chemical stability: Expected to be stable when stored and handled according to the qualified supplier specification.
- Conditions to avoid: Excessive heat, moisture/light exposure where relevant, contamination, and conditions that promote decomposition.
- Incompatible materials: Strong oxidizing agents and other reactive chemicals should be segregated unless compatibility has been established.
- Hazardous decomposition: Fire or severe thermal decomposition may generate irritating or hazardous fumes.

11 TOXICOLOGICAL INFORMATION

- Likely routes of occupational exposure include inhalation of dust/aerosol, ingestion, and skin or eye contact.
- Substance-specific acute, chronic, reproductive, sensitization, mutagenicity and carcinogenicity data are limited or not established in this reference document.
- Absence of a specific GHS classification in this reference document does not establish that the material is non-hazardous.
- No numerical acute-toxicity estimate is assigned here unless provided by the exact manufacturer/importer SDS.
- No basis is established in this reference document for listing the material as an OSHA, IARC or NTP carcinogen; this does not establish long-term safety.

12 ECOLOGICAL INFORMATION

- No reliable product-specific ecotoxicity, persistence, degradability, bioaccumulation or soil-mobility data are established in this reference document.
- Avoid uncontrolled release to drains, surface water or the environment.

13 DISPOSAL CONSIDERATIONS

- Dispose of product, contaminated absorbents and contaminated inner packaging through an appropriate chemical-waste stream in accordance with federal, state and local requirements.
- Do not dispose to drains. Empty outer packaging may be recycled only if uncontaminated and permitted locally.

14 TRANSPORT INFORMATION

DOT	Transport classification not assigned in this reference document; verify the exact manufacturer/importer SDS and packaged-product classification.
IMDG	Transport classification not assigned in this reference document; verify the exact manufacturer/importer SDS.
IATA	Transport classification not assigned in this reference document; verify the exact manufacturer/importer SDS.
SPECIAL PRECAUTIONS	Protect from moisture/physical damage as applicable and verify carrier requirements for the final packaged product.

15 REGULATORY INFORMATION

- This document follows the 16-section heading sequence described by OSHA Hazard Communication Standard 29 CFR 1910.1200 and Appendix D.
- MOTS-C is described here solely as a research-use material. This SDS does not authorize human or veterinary use.
- Regulatory status can depend on exact chemical identity, formulation, intended use, claims, distribution and jurisdiction; obtain appropriate compliance review before public distribution.
- The exact manufacturer/importer hazard classification and supplier SDS supersede this reference document where differences exist.

16 OTHER INFORMATION

PREPARATION DATE	August 18, 2026
REVISION	Reference 001
PRIMARY DATA BASIS	PubChem CID 146675088 (MOTS-c), including sequence, formula and molecular weight. Verify actual salt/counterion supplied. OSHA 29 CFR 1910.1200 Appendix D used for section structure.
IMPORTANT LIMITATION	This SDS is a standardized reference document for development and document-layout use. Before public distribution, reconcile exact chemical form, formulation/excipients, hazard classification, responsible-party contact details, emergency telephone number, storage conditions, transport status and lot/manufacturer specifications to the actual qualified supplier/manufacturer SDS.

All chemicals may present unknown hazards. The user is responsible for establishing handling procedures appropriate to the actual material, concentration, formulation, scale and workplace conditions.