

Safety Data Sheet — MOTS-c

Product code: MOTS-c · GHS Revision 7 · OSHA HazCom 29 CFR 1910.1200 · Version 1.1 — 08 October 2026

1. Identification

Product name	MOTS-c
Synonyms / catalog codes	mitochondrial-derived peptide MOTS-c; CAS 1627580-64-6
Recommended use	Laboratory research agent for in vitro and animal-model studies. For research use only (RUO).
Restrictions on use	NOT for human or veterinary use. Not a drug, food, cosmetic, or dietary supplement. Not for household use.
Supplier	BioLabs Research — operated by LEEDS MARKETING GROUP LTD (Companies House #16057409) · biolabsresearch.co
Address	33 W 19th Street, 4th Floor, New York, NY 10011, USA
Telephone	+1 929-551-8597
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2. Hazards Identification

GHS classification	Not classified as hazardous per GHS/OSHA HCS (29 CFR 1910.1200). No harmonized GHS classification exists for this research peptide.
Signal word	None
Hazard statements	No GHS hazard statements assigned. Treat as a pharmacologically active research material — exposure may be harmful.
Precautionary statements	Recommended laboratory precautions: P202 — Do not handle until all safety precautions have been read and understood. P261 — Avoid breathing dust. P262 — Do not get in eyes, on skin, or on clothing. P264 — Wash thoroughly after handling. P270 — Do not eat, drink or smoke when using this product. P280 — Wear protective gloves/eye protection. P405 — Store locked up.
Other hazards	Pharmacologically active research peptide. Avoid exposure. Effects of accidental exposure in humans are not fully characterized.
Appearance	White to off-white lyophilized powder in a glass vial.

3. Composition / Information on Ingredients

Component	MOTS-c (synthetic mitochondria-derived 16-residue peptide)
CAS number	1627580-64-6
Purity	Per lot Certificate of Analysis (see the COA accompanying this lot)
Formula / MW	See lot COA

4. First-Aid Measures

Skin contact: Wash with soap and plenty of water. Remove contaminated clothing. If irritation develops, seek medical attention.

Eye contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.

Inhalation: Remove person to fresh air. If breathing is difficult, administer oxygen; seek medical attention.

Ingestion: Rinse mouth with water. Do NOT induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Most important symptoms/effects: No complete data for humans. Pharmacologically active compound — all exposures should be treated as potentially harmful.

Note to physician: Treat symptomatically. No specific antidote. For research substance information contact admin@biolabsresearch.co.

5. Fire-Fighting Measures

Extinguishing media: Use water spray, dry chemical, carbon dioxide (CO₂), or alcohol-resistant foam. Choose extinguishing media appropriate for the surrounding fire.

Specific hazards: Combustion may generate carbon monoxide, carbon dioxide, nitrogen oxides. Fine powders of organic material may form combustible dust clouds.

Protective equipment: Wear self-contained breathing apparatus (SCBA) and full protective gear.

6. Accidental Release Measures

Personal precautions: Avoid dust generation. Avoid contact with skin, eyes, and clothing. Wear appropriate PPE (see Section 8).

Environmental precautions: Prevent material from entering drains, sewers, or waterways.

Containment and cleanup: Sweep or vacuum (with HEPA filter) spilled powder, avoiding dust generation, and collect into a labeled waste container. Clean the residue with water and detergent. Dispose of according to Section 13.

7. Handling and Storage

Handling: Use only in a licensed laboratory by trained personnel. Avoid inhalation of dust, contact with eyes, skin, and clothing. Use appropriate PPE (Section 8). Wash thoroughly after handling. Keep away from food and drink.

Storage: Store lyophilized at -20°C or below, desiccated. Store only in the original sealed vial. Protect from light and moisture. Keep out of reach of children.

Incompatibilities: Strong oxidizing agents, strong acids and bases.

8. Exposure Controls / Personal Protection

Occupational exposure limits: No OEL (OSHA PEL / ACGIH TLV) established for this research compound.

Engineering controls: Use local exhaust ventilation or a chemical fume hood when handling powders.

Eye protection: Safety glasses with side-shields or goggles (OSHA-approved).

Skin protection: Nitrile or latex laboratory gloves. Lab coat and closed shoes. Wash contaminated clothing before reuse.

Respiratory protection: Use an N95/FFP2 particulate respirator when handling bulk powder where dust may form.

General: Safety shower and eye-wash station should be available in the laboratory.

9. Physical and Chemical Properties

Physical state	Lyophilized solid powder
Color	White to off-white
Odor	Odorless to faint characteristic
Molecular weight	2,174.6 Da
Solubility	Water-soluble; see lot COA
pH (1% aq. solution)	Approximately 4–8; see lot COA
Melting / decomposition point	Not determined
Vapor pressure / density	Negligible at 20°C

10. Stability and Reactivity

Chemical stability: Stable under recommended storage conditions (lyophilized, frozen, desiccated).

Hazardous decomposition products: thermal decomposition can produce CO, CO₂, nitrogen oxides.

Hazardous polymerization: none reported.

11. Toxicological Information

Mitochondria-derived research peptide. No complete toxicological data for this research material. Not listed by IARC/NTP/OSHA.

Likely routes of exposure: inhalation of powder, accidental ingestion, skin/eye contact.

Acute symptoms (if exposed): no complete human data. Treat all exposures as potentially harmful.

Carcinogenicity: not listed by IARC, NTP, or OSHA as a known or suspected carcinogen (no data).

Chronic effects: not characterized. For research use only.

12. Ecological Information

No ecotoxicity data available. Pharmacologically active compound — prevent release into the environment, surface water, and waterways.

13. Disposal Considerations

Dispose of contents and container in accordance with local, regional, and national regulations (US EPA and state hazardous-waste rules where applicable).

Do not discharge into drains or the environment. Use an authorized hazardous-waste contractor.

14. Transport Information

US DOT / IATA / IMDG	Not regulated as dangerous goods (non-hazardous research compound)
UN number	None
Packing group	None
Marine pollutant	No

15. Regulatory Information

This substance is supplied solely for research use by qualified laboratories. It is not an FDA-approved drug and is not marketed for human or veterinary use.

US TSCA / CERCLA: not listed. SARA 302/304/311/312/313: not listed. California Prop 65: not listed.

The purchaser is responsible for complying with all applicable federal, state, and institutional regulations governing research compounds.

16. Other Information

Revision 1.1 — 08 October 2026, issued by BioLabs Research (supersedes Revision 1.0 of 01 October 2026).

This SDS is provided as a courtesy for laboratory handling of research materials. The information is based on publicly available reference data and standard GHS practice for research peptides, and is believed to be accurate as of the revision date. It does not constitute a warranty. Batch-specific purity and analytical data are provided in the lot Certificate of Analysis (COA).

The purchaser assumes all responsibility for safe storage, handling, and use. For questions contact admin@biolabsresearch.co.

BiolabsResearch.co — research-grade reagents for laboratory studies. This product is NOT for human use.