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Product: Semax
SDS No.: MTX-SDS-SEMAX
Version: 1.0 **Issued:** August 27, 2026

1 Identification

Product identifier	Semax
Synonyms	ACTH(4-7)-Pro-Gly-Pro; Met-Glu-His-Phe-Pro-Gly-Pro
CAS number	80714-61-0
Recommended use	Laboratory and research use only
Restrictions on use	Not for human or veterinary use, food, drug, cosmetic, diagnostic, therapeutic, or clinical applications
Supplier	MTX Xenovis Labs
Contact	info@mtx-labz.com https://mtx-labz.com
Emergency contact	info@mtx-labz.com

2 Hazard(s) identification

GHS classification: Not classified as a hazardous substance or mixture according to the GHS / OSHA HCS 2012 based on currently available information.

Note: This material is a research compound that has not been fully characterized toxicologically. The absence of a classification does not imply the absence of hazard. Handle in accordance with good laboratory practice.

Signal word: None. **Hazard pictograms:** None assigned.

Precautionary statements: Avoid formation and inhalation of dust. Wash hands and exposed skin thoroughly after handling. Wear protective gloves and eye protection. Keep out of reach of children and untrained persons.

3 Composition / information on ingredients

Chemical name	Semax (synthetic heptapeptide)
CAS number	80714-61-0
Molecular formula	C37H51N9O10S
Molecular weight	813.93 g/mol
Amino acid sequence	Met-Glu-His-Phe-Pro-Gly-Pro
Concentration / purity	>= 99% (peptide); see lot-specific Certificate of Analysis

4 First-aid measures

Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.

Skin contact: Wash with soap and plenty of water. If irritation develops or persists, seek medical advice.

Eye contact: Rinse cautiously with water for several minutes; remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Rinse mouth with water. Seek medical attention. Show this SDS to medical personnel.

Most important symptoms/effects: No specific symptoms known; effects of overexposure have not been characterized.

5 Fire-fighting measures

Suitable extinguishing media: Water spray, carbon dioxide (CO₂), dry chemical powder, or alcohol-resistant foam.

Specific hazards: Combustion may produce carbon oxides (CO, CO₂) and nitrogen oxides (NO_x).

Protective equipment for firefighters: Self-contained breathing apparatus and full protective clothing.

6 Accidental release measures

Personal precautions: Avoid dust formation and inhalation. Wear appropriate PPE (Section 8).

Methods for cleanup: Carefully collect by methods that minimize dust (e.g., dampen, sweep, or vacuum with HEPA). Place in a suitable closed container for disposal (Section 13). Avoid release to drains or the environment.

7 Handling and storage

Handling: Use only in a properly equipped laboratory by trained personnel. Avoid generating dust and aerosols. Do not eat, drink, or smoke when handling. Wash thoroughly after use.

Storage: Store the lyophilized powder tightly closed at -20 C (-4 F), protected from light and moisture. Once reconstituted, store refrigerated (2-8 C / 36-46 F) and use within the validated period. Keep away from incompatible materials (Section 10).

8 Exposure controls / personal protection

Occupational exposure limits: None established for this substance (OSHA PEL / ACGIH TLV not assigned).

Engineering controls: Use with adequate ventilation; a fume hood or local exhaust is recommended when handling powder.

Personal protective equipment: Nitrile gloves, safety glasses or goggles, laboratory coat. Use a NIOSH-approved dust mask/respirator where dust may be generated.

9 Physical and chemical properties

Appearance	White lyophilized powder
Odor	Odorless
Solubility	Soluble in water and bacteriostatic water
Molecular weight	813.93 g/mol
pH, melting/boiling point, flash point	Not determined
Other properties	Not determined

10 Stability and reactivity

Stability: Stable under recommended storage conditions.

Conditions to avoid: Heat, light, moisture, and repeated freeze-thaw cycles.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Carbon oxides (CO, CO₂) and nitrogen oxides (NO_x).

Possibility of hazardous reactions: None known under normal conditions of use.

11 Toxicological information

No specific toxicological data are available for this product. Acute toxicity, skin/eye irritation, sensitization, carcinogenicity, mutagenicity, and reproductive toxicity have not been established for this substance.

Routes of exposure: Inhalation, skin contact, eye contact, ingestion. Treat as a substance of unknown toxicity and handle accordingly.

12 Ecological information

No ecological data (toxicity, persistence, bioaccumulation, mobility) are available for this product. Avoid release to the environment.

13 Disposal considerations

Dispose of contents and container in accordance with all applicable local, state, and federal regulations. Do not discharge into drains or watercourses.

14 Transport information

Not classified as a dangerous good for transport under US DOT, IATA, or IMDG regulations. Not regulated. UN number: none.

15 Regulatory information

Sold strictly for laboratory and research use only. This product is not a drug and is not approved for human or veterinary use.

This substance is not listed as a controlled substance under the US Controlled Substances Act. TSCA: intended for research and development use. Users are responsible for compliance with all applicable regulations.

16 Other information

SDS version: 1.0 **Issue date:** August 27, 2026 **Prepared by:** MTX Xenovis Labs.

Disclaimer: The information herein is provided in good faith and believed to be accurate as of the issue date, but no warranty, express or implied, is made. This SDS is intended as a guide for safe handling under controlled laboratory conditions and does not constitute a guarantee of any specific property. Because the toxicological profile of this research compound is not fully characterized, it should be handled by qualified personnel using standard precautions. This document should be reviewed by a qualified safety/regulatory professional prior to publication or distribution.

End of Safety Data Sheet - Semax - MTX Xenovis Labs - For research use only.