Peptide Institute, Inc.

7-2-9 Saito-Asagi, Ibaraki-Shi, Osaka 567-0085, Japan

Safety Data Sheet (SDS)

1. PRODUCT AND COMPANY IDENTIFICATION

Catalog Code Number: 4410-s Product Name: Muscarinic Toxin 3 Supplier's Name: Peptide Institute, Inc.

Address: 7-2-9 Saito-Asagi, Ibaraki-Shi, Osaka 567-0085, Japan

Phone Number: 81-72-643-4411 Fax Number: 81-72-643-4422 Creation Date: August 21, 2007 Revised: February 13, 2019 (ver.5)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS classification: Not a hazardous substance

Other hazards: No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture: Single Substance

Common Name: Muscarinic Toxin 3 **Synonym:** MT3, MTX3, m4-toxin

(Green Mamba, Dendroaspis angusticeps)

Structure: Leu-Thr-Cys-Val-Thr-Lys-Asn-Thr-Ile-Phe-

Gly-Ile-Thr-Thr-Glu-Asn-Cys-Pro-Ala-Gly-Gln-Asn-Leu-Cys-Phe-Lys-Arg-Trp-His-Tyr-Val-Ile-Pro-Arg-Tyr-Thr-Glu-Ile-Thr-Arg-Gly-Cys-Ala-Ala-Thr-Cys-Pro-Ile-Pro-Glu-Asn-Tyr-Asp-Ser-Ile-His-Cys-Cys-Lys-Thr-

Asp-Lys-Cys-Asn-Glu

(Disulfide bonds between Cys³-Cys²⁴, Cys¹⁷-Cys⁴², Cys⁴⁶-Cys⁵⁷, and Cys⁵⁸-Cys⁶³)

Molecular Formula: $C_{319}H_{489}N_{89}O_{97}S_8$ (M.W. 7379.4)

Product Description: Specific Ligand for Muscarinic Acetylcholine Receptor-4 (M4)

CAS Registry Number: -

EINECS No.: -

UN No. & Hazard Class: This material is not classified as hazardous goods.

4. FIRST AID MEASURES

Inhalation: If inhaled, remove person to fresh air and keep comfortable for breathing. Wash your mouth and nasal cavity

thoroughly with clean water and get medical attention.

Skin contact: In case of skin contact, wash with plenty of water. Call a doctor, if you feel unwell. **Eye contact:** In case of contact with eyes, wash with plenty of water. Call a doctor, if you feel unwell.

Ingestion: If swallowed, rinse mouth. Call a doctor, if you feel unwell.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray, carbon dioxide, dry chemical powder, or appropriate form.

Special extinguishing method: Complies with fire extinguishing method in normal fire.

Specific hazards arising from the chemical product:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

Environmental precautions:

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminant and methods and materials for cleaning up:

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust.

7. HANDLING AND STORAGE

Handling: Avoid inhalation. Avoid contact with eyes, skin and clothing.

Storage: Keep container tightly closed. Store in a cool dry place. Recommended Storage -20 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: No data available Exposure limits: No data available Personal protective equipment:

Wear appropriate respirator, chemical-resistant gloves, safety goggles, other protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White amorphous powder

Reactivity in Water: No reactivity

Solubility: Soluble in H₂O

10. STABILITY AND REACTIVITY

Stability: No data available **Reactivity:** No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity: No data available

Skin irritation/corrosion: No data available Serious eye damage/ irritation: No data available Respiratory or skin sensitization: No data available Reproductive cell mutagenicity: No data available

Carcinogenicity: No data available Reproductive toxicity: No data available STOT-single exposure: No data available STOT-repeated exposure: No data available Aspiration hazard: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available

Mobility in soil: No data available

13. DISPOSAL CONSIDERATIONS

Observe all federal, state and local environmental regulations.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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14. TRANSPORT INFORMATION

UN number and UN classification: This material is not classified as hazardous goods.

15. REGULATORY INFORMATION

Not applicable.

Caution: The chemical, physical and toxicological properties of this product have not been thoroughly investigated. Exercise due care.

16. OTHER INFORMATION

Disclaimer: NOT FOR USE IN HUMANS. For R&D use only. Not for drug, household or other uses.

Reference:

- 1. JCIA: Japan Chemical Industry Association GHS support Guidelines (June, 2012)
- 2. JIS Z7253:2012 Hazard communication of chemicals based on GHS-Labelling and Safety Data Sheet (SDS)
- 3. NITE: National Institute of Technology and Evaluation (JAPAN) web site

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