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: 4271-s **Product Name:** α-Defensin-1 (Human) **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:** September 19, 2007 **Revised:** January 10, 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: α-Defensin-1 (Human)

Synonym: HNP-1 (HNP: Human Neutrophil Peptide-1) Structure: Ala-Cys-Tyr-Cys-Arg-Ile-Pro-Ala-Cys-Ile-Ala-Gly-Glu-Arg-Arg-Tyr-Gly-Thr-Cys-Ile-Tyr-Gln-Gly-Arg-Leu-Trp-Ala-Phe-Cys-Cys

(Disulfide bonds between Cys²-Cys³⁰, Cys⁴-Cys¹⁹, and Cys⁹-Cys²⁹)

Molecular Formula: $C_{150}H_{222}N_{44}O_{38}S_6$ (M.W. 3442.0)

Product Description: Antimicrobial Peptide/Chemoattractant for Monocytes

CAS Registry Number: 148093-65-6

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.

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.

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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.

14. TRANSPORT INFORMATION

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

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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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