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: 4243-v Product Name: Elafin (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 Recommended uses: Reagent

Restrictions on use: Seek expert judgment as necessary.

Creation Date: January 20, 2015 Revised: July 26, 2024 (ver. 3)

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 Chemical Name, Common Name or Substance Name:

Elafin (Human)

Structure: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-

Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-

Met-Ala-Cys-Phe-Val-Pro-Gln

(Disulfide bonds between Cys¹⁶-Cys⁴⁵, Cys²³-Cys⁴⁹, Cys³²-Cys⁴⁴, and Cys³⁸-Cys⁵³)

Molecular Formula: C₂₅₄H₄₁₆N₇₂O₇₅S₁₀ (M.W. 5999.1)

Product Description: Elastase-Specific Inhibitor from Human Skin / Innate Immune Factor

CAS Registry Number: 142191-63-7

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

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

Unsuitable Extinguishing media: Nothing special.

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

Specific hazards arising from the chemical product:

SDS No. 4243 Elafin (Human) / Revised: July 26, 2024

Peptide Institute, Inc.

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

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.

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:

Technical measures: No data available

Precautions for safe handling: Avoid inhalation. Avoid contact with eyes, skin and clothing.

Storage:

Condition for safe storage: Keep container tightly closed. Store in a cool dry place.

Recommended storage temperature: -20 °C.

Container and packaging materials for safe handling: No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: No data available Exposure limits: No data available

Concentration standard values under Japanese Safety and Health Act: No data available

Personal protective equipment:

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid (amorphous powder)

Color: White

Odor: No data available

Melting point/freezing point: No data available

Boiling point or initial boiling point and boiling range: No data available

Flammability: No data available

Lower and upper explosion limit/flammability limit: No data available

Flash point: No data available

Auto-ignition temperature: No data available **Decomposition temperature:** No data available

pH: No data available

Kinematic viscosity: No data available

Solubility: Soluble in H₂O

n-Octanol/water partition coefficient: No data available

Vapor pressure: No data available

Density and/or relative density: No data available

Relative vapor density: No data available **Particle characteristics:** No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: No data available

SDS No. 4243 Elafin (Human) / Revised: July 26, 2024

Peptide Institute, Inc.

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

Possibility of hazardous reactions: No data available

Conditions to avoid: No data available Incompatible materials: No data available

Hazardous decomposition products: 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

Hazards to ozone layer: No data available

13. DISPOSAL CONSIDERATIONS

Information on the safe and environmentally sound disposal or recycling of chemicals and contaminated containers and packaging:

Obey local/national regulations.

14. TRANSPORT INFORMATION

UN number and UN classification: This material is not classified as hazardous goods. **Regulatory information if there are Japanese regulations:** Not applicable.

15. REGULATORY INFORMATION

Names of applicable Japanese laws and information on regulation based on those laws: 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 (September, 2023)
- 2. JIS Z 7253:2019 Hazard communication of chemicals based on GHS-Labelling and Safety Data Sheet (SDS)
- 3. NITE: National Institute of Technology and Evaluation (JAPAN) web site

The above information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of Peptide Institute, Inc. It relates only to the specific product designated herein, and does not relate to use in combination with any other material or in any process. Peptide Institute, Inc. assumes no legal responsibility for use of or reliance upon this information.

SDS No. 4243 Elafin (Human) / Revised: July 26, 2024