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: 3701-v/3702-v/3703-v/3704-v/3705-v/3706-v/3707-v/3708-v/3709-v/3710-v/ 3711-v/3712-v/3713-v/3714-v/3715-v/3716-v/3717-v/3718-v/3719-v

Product Name: FRETS-25Xaa Series 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: January 31, 2012 Revised: April 19, 2019 (ver. 3)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS classification Not a hazardous substance

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture: Mixture Common Name: FRETS-25Xaa Series (Trifluoroacetate Form) Structure: D-A2pr(Nma)-Gly-Zaa-Yaa-Xaa-Ala-Phe-Pro-Lys(Dnp)-D-Arg-D-Arg Zaa = Phe/Ala/Val/Glu/Arg Yaa = Pro/Tyr/Lys/Ile/Asp Xaa = Ala (3701-v), Arg (3702-v), Asn (3703-v), Asp (3704-v), Gln (3705-v), Glu (3706-v), Gly (3707-v), His (3708-v), Ile (3709-v), Leu (3710-v), Lys (3711-v), Met (3712-v), Phe (3713-v), Pro (3714-v), Ser (3715-v), Thr (3716-v), Trp (3717-v), Tyr (3718-v), Val (3719-v) A₂pr(Nma): N^{β} -[2-(Methylamino)benzoyl]-2,3-diaminopropionic acid Lys(Dnp): *N*^ε-(2,4-Dinitrophenyl)lysine Product Description: Fluorescence-Quenching Substrate Library CAS Registry Number: -**EINECS No.:** -UN No. & Hazard Class: -

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: Yellow jelly-like solid Reactivity in Water: No reactivity Solubility: Soluble in DMSO

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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