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: 4512-v Product Name: TDIF [CLE41/44 Peptide] 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: February 21, 2019

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: TDIF [CLE41/44 Peptide]
Synonym: Tracheary Element Differentiation Inhibitory Factor
Structure: His-Glu-Val-Hyp-Ser-Gly-Hyp-Asn-Pro-Ile-Ser-Asn
Molecular Formula: C₅₃H₈₂N₁₆O₂₁ (M.W. 1279.3)
Product Description: Dodecapeptide Regulating a Vascular Stem Cell Population in Plants
CAS Registry Number: 959926-46-6
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.

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.

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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: 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.

15. REGULATORY INFORMATION

Not applicable.

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

SDS No. 4512 TDIF [CLE41/44 Peptide]

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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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