Peptide Institute, Inc.
7-2-9 Saito-Asagi, Ibaraki-Shi, Osaka 567-0085, Japan

Safety Data Sheet (SDS)

1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Catalog Code Number:</th>
<th>3171-v</th>
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</thead>
<tbody>
<tr>
<td>Product Name:</td>
<td>Ac-Asp-Glu-Val-Asp-MCA</td>
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<tr>
<td>Supplier's Name:</td>
<td>Peptide Institute, Inc.</td>
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<tr>
<td>Address:</td>
<td>7-2-9 Saito-Asagi, Ibaraki-Shi, Osaka 567-0085, Japan</td>
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<td>Phone Number:</td>
<td>81-72-643-4411</td>
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<tr>
<td>Fax Number:</td>
<td>81-72-643-4422</td>
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<tr>
<td>Creation Date:</td>
<td>February 4, 2005</td>
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<tr>
<td>Revised:</td>
<td>January 24, 2019 (ver. 4)</td>
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</tbody>
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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: Single Substance
Common Chemical Name: Acetyl-L-aspartyl-L-glutamyl-L-valyl-L-aspartic acid α-(4-methylcoumaryl-7-amide)
Synonym: Ac-DEVD-MCA
Molecular Formula: C₃₀H₃₇N₅O₁₃ (M.W. 675.64)
Product Description: Substrate for Caspase-3/7/8
CAS Registry Number: 169332-61-0
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.

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: Colorless jelly-like solid
Reactivity in Water: No reactivity
Solubility: Soluble in DMF or 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.

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.

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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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