

Safety Data Sheet (SDS)

1. PRODUCT AND COMPANY IDENTIFICATION

Catalog Code Number: 4217-v
Product Name: μ -Conotoxin GIIIB
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: July 25, 1994
Revised: December 25, 2018 (ver.6)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS classification: Not a hazardous substance

Other hazards: May be fatal if enters bloodstream.

Do not breathe dust.

Do not use if skin is cut or scratched. Wash thoroughly after handling.

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 Name: μ -Conotoxin GIIIB

(Marine Snail, *Conus geographus*)

Structure: Arg-Asp-Cys-Cys-Thr-Hyp-Hyp-Arg-Lys-Cys-
Lys-Asp-Arg-Arg-Cys-Lys-Hyp-Met-Lys-Cys-
Cys-Ala-NH₂

(Disulfide bonds between Cys³-Cys¹⁵, Cys⁴-Cys²⁰, and Cys¹⁰-Cys²¹)

Molecular Formula: C₁₀₁H₁₇₅N₃₉O₃₀S₇ (M.W. 2640.2)

Product Description: Na⁺ Channel Blocker: Specific for Skeletal Muscle

CAS Registry Number: 140678-12-2

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.

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: LD₅₀(i.p. mouse): 0.095 mg/kg

LD₅₀(i.p. goldfish): 2.77 mg/kg

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

Japanese regulations

Export Trade Control Order Appended Table 1 and Ministerial Ordinance that establishes cargo or technology pursuant to the provision of the Appended Table of Foreign Exchange Order Article 2-2 (Corresponding to conotoxin)

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-Labeling 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.