

Safety Data Sheet (SDS)

Section 1: Identification

1.1 Product Identification

Product Name: Bivalirudin

Product Number: Sigma-1492025171

Brand: Sigma

CAS Number: 128270-60-0

EC Number: 811-536-7

Molecular Formula: C₉₈H₁₃₈N₂₄O₃₃

Molecular Weight: 2,180.3 g/mol

Website: [Sigma Chemical](#)

1.2 Supplier Details

Company Name: Sigma Chemical Co., Ltd.

Address: Room 2-1-2301, Jiahe Xinxing, No.130, Shandong Road, Shibe District, Qingdao City, Shandong Province, China

Phone Number: +86 18661891880

Email: chemweb3@foxmail.com

1.3 Emergency Contact Number

Emergency Contact: +86 18661891880

1.4 Recommended Use and Restrictions

For research and development purposes only. Not for human or veterinary diagnostic or therapeutic use. Not for household use.

Section 2: Hazard Identification

2.1 GHS Classification

Not classified as hazardous according to GHS.

2.2 GHS Label Elements

Pictogram: None

Signal Word: None

Hazard Statements: None

Precautionary Statements (general): Handle in accordance with good industrial hygiene and safety practice.

2.3 Physical and Chemical Hazards

Non-flammable; no special physical hazards identified under normal conditions of use.

2.4 Health Hazards

No GHS-classifiable hazards identified. Avoid inhalation of dust and contact with eyes and skin as a general precaution.

2.5 Environmental Hazards

Water hazard class (self-assessment): 1 (slightly hazardous to water).

Section 3: Composition/Information on Ingredients

3.1 Substance

Substance: Bivalirudin

Synonyms:

Phe-Pro-Arg-Pro-(Gly)4-Asn-Gly-Asp-Phe-Glu-Glu-Ile-Pro-Glu-Glu-Tyr-Leu;

Angiomax; Hirulog

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Concentration: 100% (solid)

Section 4: First Aid Measures

Inhalation: Move to fresh air. Obtain medical attention if symptoms occur.

Skin Contact: Wash with plenty of water. Remove contaminated clothing. Get medical advice if irritation develops.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. If symptoms occur, seek medical advice.

Most Important Symptoms/Effects: No known significant effects; treat symptomatically.

Section 5: Firefighting Measures

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. A solid water stream may be inefficient.

Specific Hazards Arising from the Chemical: Thermal decomposition may produce carbon oxides and nitrogen oxides.

Protective Equipment for Firefighters: Wear self-contained breathing apparatus and protective clothing.

Section 6: Accidental Release Measures

Personal Precautions: Avoid dust formation. Ensure adequate ventilation. Wear appropriate PPE.

Environmental Precautions: Prevent entry into waterways, drains, or confined areas.

Methods for Containment/Clean-up: Sweep up and place in suitable container for disposal. Avoid generating dust.

Section 7: Handling and Storage

Handling: No special measures required; follow good laboratory practices. Avoid creating dust; avoid contact with eyes/skin.

Storage: Store tightly closed in a cool, dry, well-ventilated place. Follow any product insert guidance.

Incompatibilities: Strong oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Control Parameters: No occupational exposure limits established.

Engineering Controls: Use in a well-ventilated area.

Personal Protective Equipment: Safety glasses; lab coat; gloves resistant to the substance as determined by glove manufacturer. Respiratory protection not normally required.

General Hygiene: Wash hands thoroughly after handling.

Section 9: Physical and Chemical Properties

Appearance: Solid

Color: Not determined

Odor: Characteristic

Molecular Formula: C₉₈H₁₃₈N₂₄O₃₃

Molecular Weight: 2,180.3 g/mol

Solubility: DMF 30 mg/mL; DMSO 30 mg/mL; PBS (pH 7.2) 10 mg/mL

Melting Point/Range: Not determined

Boiling Point/Range: Not determined

Flash Point: Not applicable

pH: Not applicable

Flammability: Not flammable

Decomposition Temperature: Not determined

Partition Coefficient (n-octanol/water): Not determined

Vapor Pressure/Density: Not applicable

Relative Density: Not determined

Section 10: Stability and Reactivity

Reactivity: No known hazardous reactions.

Chemical Stability: Stable under recommended storage conditions.

Conditions to Avoid: None known under recommended conditions.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, nitrogen oxides.

Section 11: Toxicological Information

Acute Toxicity: Not classified.

Skin/Eye Irritation: Not expected to be irritating.

Sensitization: Not expected to be a sensitizer.

Carcinogenicity/Mutagenicity/Reproductive Toxicity: Not classified; no listings by IARC, NTP, OSHA.

Section 12: Ecological Information

Ecotoxicity: No data available.

Persistence/Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: Water hazard class 1 (slightly hazardous to water).

Section 13: Disposal Considerations

Dispose of contents/container in accordance with local/regional/national regulations. Smaller quantities may be disposed of with household waste if allowed by local regulations.

Section 14: Transport Information

UN Number: Not regulated

UN Proper Shipping Name: Not regulated

Transport Hazard Class: Not regulated

Packing Group: Not regulated

Environmental Hazards: Not applicable

Special Precautions for User: Not applicable

Section 15: Regulatory Information

SARA 302/311/313: Not listed.

TSCA: Not listed for this substance.

California Proposition 65: Not listed.

Chemical safety assessment: Not carried out for this product.