

Safety Data Sheet

Section 1: Identification

Product identifier

Product Name: Hirudin

Product Code: Z02812-10; Z02812-1

Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Hazard Communication & Compliance

Details of the supplier of the safety data sheet

Manufacturer: GenScript
860 Centennial Ave.
Piscataway, NJ 08854 United States
www.genscript.com
product@genscript.com

Telephone (General): 1-732-885-9188

Emergency telephone number

Manufacturer: 1-877-436-7274

Section 2: Hazards identification

According to OSHA 29 CFR 1910.1200 HCS

Emergency Overview: Aqueous solution. Toxicological properties of components have not been fully investigated.

Health Effects: Not classified

Inhalation: Not known to present an inhalation hazard under normal use.

Skin: Causes skin irritation

Eyes: Causes serious eye irritation

Ingestion: May be harmful if swallowed.

Chronic Effects/Target Organ Effects: None known.

Medical Conditions Aggravated By Exposure: None known.

Environmental Effects: None known.

Section 3 - Composition/Information on Ingredients

Components	CAS-No	EINECS-No	Weight %
Na ₂ HPO ₄	7558-79-4	231-448-7	0.2
NaH ₂ PO ₄	7558-80-7	231-449-2	0.2
NaCl	7674-14-5	231-598-3	0.1

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Section 4: First-Aid Measures

Inhalation	Allow victim to breathe fresh air. Allow the victim to rest.
Skin	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
Eye	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Special protective equipment for firefighters

Standard procedure for chemical fires.

Section 6 - Accidental Release Measures

Personal Precautions	Always wear recommended Personal Protective Equipment. Use personal protection equipment.
Methods for cleaning up	Soak up with inert absorbent material.
Environmental precautions	Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Section 7 - Handling and Storage

Handling: Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

Storage: Store at -20°C or below. After reconstitution, aliquot and store at -20°C or below.

Keep container closed when not in use.

Section 8 - Exposure Controls/Personal Protection

Exposure Limit Values: None established

Exposure Controls: Use process enclosures, local exhaust ventilation, or other engineering controls as needed.

Respiratory Protection: Not expected to be required. However, if used, consult with respirator manufacturer to determine respirator selection, use, and limitations.

Eye/Face Protection: Use safety glasses. Where contact with the eyes is likely, use chemical goggles.

Skin/Hand Protection: Use chemical gloves as needed. Use of a lab coat or equivalent is recommended to minimize contact with clothing and skin as a good hygiene practice.

Section 9 - Physical and Chemical Properties

General information

Form	Lyophilized powder
Appearance	White
Odor	No data available
Odor Threshold	No data available
Boiling point / boiling range	No data available
Melting point / melting range	No data available
Flash point:	No data available
Autoignition Temperature	No data available
Oxidizing properties	No data available
Water solubility	soluble
pH:	7.0

Section 10: Stability and Reactivity

Reactivity

No additional information available

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Not established.

Conditions to avoid

None.

Incompatible materials

None.

Hazardous decomposition products

None.

Section 11 - Toxicological Information**Acute Toxicity**

None available for the product.

Principle Routes of Exposure Potential Health Effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.
Carcinogenic effects	None.
Mutagenic effects	None.
Reproductive toxicity	None.
Sensitization	None.

Section 12 - Ecological Information

Ecotoxicity	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
Mobility	No information available.
Biodegradation	Inherently biodegradable.
Bioaccumulation	Material does not bioaccumulate.

No Ecological information is available.

Section 13 - Disposal Considerations

Product waste: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

Proper Shipping Name	No dangerous good in sense of these transport regulations
Hazard Class	None
Subsidiary class	None
Packing group	None
UN-No	None

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

US Regulations:

This product meets the following SARA 311/312 hazard categories: none.

This product contains the following SARA 302 Extremely Hazardous Substances: none.

This product contains the following SARA 313 Toxic Chemicals: none.

This product contains the following CERCLA Hazardous Substances: none.

The components of this product are listed on TSCA.

EU Regulations:

This product does not meet the classification and labeling criteria under 1999/45/EC as a dangerous preparation. The components of this product are listed on the European Inventory of Existing Chemical Substances (EINECS) or meet the polymer exemption.

Canadian Regulations:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and it contains the information required by the CPR.

This product meets WHMIS classification D2B.

Components of this product are listed on the DSL.

Section 16 - Other Information

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