



Section	1. Identification		
Product Name	Clostripain		
Product Code	004-1000, 004-2000		
Chemical Name	Purified Clostripain from <i>Clostridium histolyticum</i>		
Synonyms	Clostridiopeptidase B		
Intended Application	Purified enzyme for the release of cells from a tissue matrix		
Manufacturer	VitaCyte, LLC 1341 Sadlier Circle West Drive Indianapolis, IN 46239		
Technical Phone #	317-917-3457		
Section	2. Hazard(s) Identification		
Hazard Classification	GHS Classification in accordance with 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) – Not a hazardous substance.		
Hazard Statements	Not a hazardous substance.		
Section	3. Composition/Information on Ingredients		
	Component	CAS-No	Weight %
	Purified Clostripain	9028-00-6	100 %
Section	4. First-Aid Measures		
Eyes	In case of contact, immediately wash eyes with copious amounts of water for at least 15 minutes.		
Skin	In case of contact, wash skin with soap and copious amounts of water. Remove contaminated clothing and shoes.		
Inhalation	If swallowed, wash out mouth with water provided person is conscious. Call a physician.		
Ingestion	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call Poison Control Center or seek medical attention.		
Section	5. Fire-Fighting Measures		
Suitable Extinguishing Media	Water spray, carbon dioxide, dry chemical powder, or appropriate foam		
Unsuitable Extinguishing Media	No information available		
Autoignition Temperature	Not applicable		
Explosion Hazard	No information available		
Hazardous Combustion Products	Carbon monoxide, carbon dioxide		
Firefighting Precautions	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.		
NFPA Rating	Health 1 / Flammability 0 / Instability 0 / Physical Hazards N/A		

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Section	6. Accidental Release Measures
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Personal Precaution	Keep bottle tightly closed and avoid forming dust.
Emergency Procedures	Ventilate area and evacuate personnel to safe area.
Containment	Soak up liquid with absorbent material and place contaminated material in appropriate sealed container for waste disposal.
Clean-Up	Wash spill site after containment is complete.

Section	7. Handling and Storage
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Handling	Avoid dust formation. Do not get in eyes, on skin, on clothing, or breathe dust.
Storage	Keep in a tightly closed container at -20°C or colder.

Section	8. Exposure Controls/Personal Protection
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Permissible Exposure Limits	This product does not have occupational exposure limits.
Engineering Controls	Safety shower, eye wash station and mechanical exhaust system
Eye Protection	Chemical safety goggles or appropriate eye protection
Skin Protection	Compatible chemical-resistant gloves
Respiratory Protection	Respiratory protection is not required under normal use of this product. If respiratory protection is needed use a government approved respirator.
Hygiene	Wash thoroughly after handling.

Section	9. Physical and Chemical Properties
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Appearance	White to off-white lyophilized cake
Physical State	Solid
pH	7 – 8
Molecular Weight	~55 kDa
Boiling Point/Range	Not determined
Melting Point/Range	Not determined
Freezing Point	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Evaporation Rate	Not determined
Specific Gravity	Not determined
Solubility	Soluble in water, limit not determined

Section	10. Stability and Reactivity
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Reactive Hazard	None known, based on information available
Stability	Stable under ordinary conditions of storage and use
Conditions to Avoid	Heat and extreme pH
Incompatible Materials	Strong oxidizing agents, strong acids and bases
Hazardous Decomposition	Nature of decomposition products not known
Hazardous Polymerization	None under normal processing
Hazardous Reactions	None under normal processing

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Section	11. Toxicological Information			
Routes of Exposure	Ingestion, inhalation, skin and/or eye contact			
Acute Toxicity	No information available			
Chronic Toxicity	No information available			
Carcinogenicity	IARC	NTP	OSHA	ACGIH
Collagenase	Not listed	Not listed	Not listed	Not listed
Glycylglycine	Not listed	Not listed	Not listed	Not listed
Calcium Chloride	Not listed	Not listed	Not listed	Not listed
Symptoms both acute and delayed	May cause skin, lung and eye irritation. May be harmful if absorbed through the skin, ingested or inhaled.			

Section	12. ECOLOGICAL INFORMATION			
Ecotoxicity	No information available			
Persistence	Unlikely based on information available			
Bioaccumulation	No information available			
Mobility	Likely to be mobile in the environment due to solubility in water			

Section	13. DISPOSAL CONSIDERATIONS			
Waste Disposal	Recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.			

Section	14. TRANSPORT INFORMATION			
DOT	US, Not regulated			
TDG	Canada, Not regulated			
IATA	International Air Transport Association, Not regulated			
IMDG/IMO	International Maritime Dangerous Goods, Not regulated			

Section	15. REGULATORY INFORMATION							
US Federal TSCA 12(b)	Not applicable							
US Federal CERCLA	Not applicable							
US Federal SARA 313	Not applicable							
US Federal 311/312 (US)	Acute health hazard							
California Prop 65	Not listed							
Canada DSL/NDSL	Not listed							
European Union EINECS	232-822-2							
International	NLP	ELINCS	ENCS	AICS	PICCS	IECSC	KECL	
	Not listed	Not listed	Not listed	Not listed	Not listed	Not Listed	Not listed	

Section	16. OTHER							
Prepared By	VitaCyte Regulatory Affairs (feedback@vitacyte.com)							
Creation Date	5 May 2009							
Revision Date	4 Oct 2023							
Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).							
Disclaimer	The information provided on this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a							

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guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.