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**SIGMA-ALDRICH**

## Material Safety Data Sheet

Date Printed: 01/25/2005  
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 Version 1.30

### Section 1 - Product and Company Information

Product Name	Endoproteinase Glu-C from <i>Staphylococcus aureus</i> V8
Product Number	P6181
Brand	Sigma Chemical
Company	Sigma-Aldrich
Street Address	3050 Spruce Street
City, State, Zip, Country	SAINT LOUIS, MO 63103 US
Technical Phone:	314 771 5765
Fax:	800 325 5052
Emergency Phone:	414 273 3850 Ext. 5996

### Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
ENDOPROTEINASE GLU-C FROM S. AUREUS -15 U/MG (+/-5 U)*	66676-43-5	No		

### Formula Synonyms

### Section 3 - Hazards Identification

#### Emergency Overview

Harmful.  
 Irritating to eyes, respiratory system and skin.  
 Target organ(s): Lungs.

**HMIS Rating**  
 Health: 3\* Flammability: 0 Reactivity: 0

**NFPA Rating**  
 Health: 3 Flammability: 0 Reactivity: 0

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

**Oral Exposure**  
 If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**Inhalation Exposure**  
 If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

#### Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### Section 5 - Fire Fighting Measures

**Autogignition Temp:** N/A

#### Extinguishing Media

**Suitable**  
 Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### Firefighting

**Protective Equipment**  
 Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
**Specific Hazard(s)**  
 Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

#### Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

**User Exposure**  
 Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage

**Suitable**  
 Keep tightly closed. Store at -20°C

### Section 8 - Exposure Controls / PPE

#### Engineering Controls

Mechanical exhaust required.

#### Personal Protective Equipment

**Other**  
 Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

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**General Hygiene Measures**

Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Section 9 - Physical/Chemical Properties**

Appearance	
Physical State	Color
Solid	White
<b>Molecular Weight:</b>	N/A
pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A
Flammability	N/A
Autoglowition Temp	N/A
Solubility	N/A

N/A = not available

**Section 10 - Stability and Reactivity****Stability**

Stable

Stable.

**Materials to Avoid**

Oxidizing agents.

**Hazardous Decomposition Products****Hazardous Decomposition Products**

Nature of decomposition products not known.

**Hazardous Polymerization****Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information****Route of Exposure****Skin Contact**

Causes skin irritation.

**Skin Absorption**

May be harmful if absorbed through the skin.

**Eye Contact**

Causes eye irritation.

**Inhalation**

May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

**Ingestion**

May be harmful if swallowed.

**Sensitization****Respiratory**

May cause allergic respiratory reaction.

**Skin**

May cause allergic skin reaction.

**Target Organ(s) or System(s)**

Lungs.

**Signs and Symptoms of Exposure**

Repeated exposure can cause: Asthma.

**Conditions Aggravated by Exposure**

The toxicological properties have not been thoroughly investigated.

RTECS Number: N/A

**Section 12 - Ecological Information**

No data available.

**Section 13 - Disposal Considerations****Appropriate Method of Disposal of Substance or Preparation**

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

**Section 14 - Transport Information****DOT**

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

**IATA**

Non-Hazardous for Air Transport: Non-hazardous for air transport.

## Section 15 - Regulatory Information

### EU Additional Classification

Symbol of Danger: Xn

Indication of Danger

Harmful.

### Risk Statements

R: 36/37/38 42/43

Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.

### Safety Statements

S: 22 24 26 36/37

Do not breathe dust. Avoid contact with skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

### US Classification and Label Text

Indication of Danger

Harmful.

### Risk Statements

Irritating to eyes, respiratory system and skin.

### Safety Statements

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. Do not breathe dust.

### US Statements

Target organ(s): Lungs.

## United States Regulatory Information

SARA Listed: No

## Canada Regulatory Information

### WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

## Section 16 - Other Information

### Disclaimer

For R&D use only. Not for drug, household or other uses.

### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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