

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product identifiers

Product name: Collagenase type I (Worthington – USA origin)  
Product number: LS0004194, LS0004196  
Brand: PAN Biotech

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

Identified uses: Laboratory chemicals, Manufacture of substances

### Details of the supplier of the safety data sheet

Company: PAN Biotech GmbH  
Am Gewerbepark 13  
94501 Aidenbach  
GERMANY  
Telephone: +49-(0)8543-6016-30  
Fax: +49-(0)8543-6016-49  
E-mail: info@pan-biotech.de

### Emergency telephone number

Emergency phone: +49-(0)8543-6016-30 or +49 151 51557123

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2)  
Eye irritation (Category 2)  
Respiratory sensitization (Category 1)  
Specific target organ toxicity - single exposure (Category 3)

### Label elements

#### Labeling according Regulation (EC) No 1272/2008

Pictogram



Signal word: Danger

Hazard statement(s)

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P280 Wear protective gloves  
P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P342 + P311 If experiencing respiratory symptoms: Call a poison center or doctor/physician.

Supplemental Hazard Statements None

### Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Collagenase

CAS-No.	EC-No.	Index-No.	Classification	Concentration
9001-12-1	232-582-9	647-014-00-9	Skin Irrit. 2; Eye Irrit. 2; Resp. Sens. 1; STOT SE 3; H315., H319, H334, H335	<= 100%

### 4. FIRST AID MEASURES

#### Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

##### Most important symptoms and effects, both acute and delayed

Prolonged or repeated exposure can cause: asthma

##### Indication of any immediate medical attention and special treatment needed

No data available

### 5. FIREFIGHTING MEASURES

#### Extinguishing media

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### Special hazards arising from the substance or mixture

Nature of decomposition products not known.

##### Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

##### Further information

No data available

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### Environmental precautions

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

#### Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

Components with workplace control parameters

#### Exposure controls

### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance form	liquid
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing point	no data available
Initial boiling point and boiling range	no data available
Flash point	no data available
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Autoignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

## 10. STABILITY AND REACTIVITY

Reactivity	no data available
Chemical stability	no data available
Possibility of hazardous reactions	no data available
Conditions to avoid	no data available
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Other decomposition products - no data available

## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Acute toxicity	no data available
Skin corrosion/irritation	no data available
Serious eye damage/eye irritation	no data available
Respiratory or skin sensitization	May cause allergic respiratory reaction.
Germ cell mutagenicity	no data available

### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity** no data available

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** no data available

**Aspiration hazard** no data available

### **Potential health effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes serious eye irritation.

**Signs and Symptoms of Exposure** Prolonged or repeated exposure can cause: asthma

### **Additional Information**

RTECS: Not available

## **12. ECOLOGICAL INFORMATION**

**Toxicity** no data available

**Persistence and degradability** no data available

**Bioaccumulative potential** no data available

**Mobility in soil** no data available

**Results of PBT and vPvB assessment** no data available

**Other adverse effects** no data available

## **13. DISPOSAL CONSIDERATIONS**

### **Waste treatment methods**

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### **Contaminated packaging**

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

### **UN number**

ADR/RID: -

IMDG: -

IATA: -

### **UN proper shipping name**

ADR/RID: not dangerous goods

IMDG: not dangerous goods

IATA: not dangerous goods

### **Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

### **Packaging group**

ADR/RID: -

IMDG: -

IATA: -

### **Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### **Special precautions for user**

no data available

## **15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

### **Chemical Safety Assessment**

no data available

## **16. OTHER INFORMATION**

### **Further information**

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. PAN Biotech GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.pan-biotech.com](http://www.pan-biotech.com) or reverse side of invoice or packing slip for additional terms and conditions of sale.