

# MATERIAL SAFETY DATA SHEET

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

### Product identifiers

Product name: Trypsin from porcine pancreas, lyophilized powder, Type IX-S, 13,000-20,000 BAEE units/mg protein  
Product number: P10-330010P  
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 6  
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 in accordance to. Regulation (EC) no 1272/2008

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

### Label elements

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

Pictogram



Signal word: Danger

### Hazard statements

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 statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P280 Wear eye protection / face protection.  
P284 Wear respiratory protection.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/physician if you feel unwell.  
P337 + P313 If eye irritation persists: Get medical advice/attention.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or 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

| Component | CAS-No.   | EC-No.     | Classification  | Concentration % |
|-----------|-----------|------------|---|-----------------|
| Trypsin   | 9002-07-7 | 232-6950-8 | Skin Irrit. 2; Eye Irrit. 2; .Resp.<br>Sens. 1; STOT SE3; H315,<br>H319, H334, H335 | ≤ 100%          |

### 4. 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**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

No data available.

### 5. FIREFIGHTING MEASURES

#### **Extinguishing Media**

#### **Suitable extinguishing media**

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

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

Nature of decomposition products not known.

#### **Special Protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available.

### 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions**

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 for 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. Product is sensitive to light and moisture.

Recommended storage temperature: -20°C

Storage class (TRGS 510). Non combustible solids

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Personal protective equipment**

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Hand 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 89/689/EEC and the standard EN 374 derived from it.

### **Eye 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 and body protection**

Complete suit protecting against chemicals. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### **Hygiene measures**

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

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Appearance**

|                                       |                     |
|---------------------------------------|---------------------|
| Form                                  | powder, lyophilized |
| pH                                    | No data available   |
| Melting point                         | No data available   |
| Boiling point                         | No data available   |
| Flash point                           | No data available   |
| Flammability                          | No data available   |
| Autoignition Temp                     | No data available   |
| Oxidizing Properties                  | No data available   |
| Explosive Properties                  | No data available   |
| Explosion Limits                      | No data available   |
| Vapor Pressure                        | No data available   |
| Partition Coefficient n-Octanol/water | No data available   |
| Viscosity                             | No data available   |
| Vapor Density                         | No data available   |
| Saturated Vapor Conc.                 | No data available   |
| Evaporation Rate                      | No data available   |
| Relative Density                      | No data available   |
| Decomposition Temp.                   | No data available   |
| Solvent Content                       | No data available   |
| Water Content                         | No data available   |
| Surface Tension                       | No data available   |
| Conductivity                          | No data available   |
| Solubility                            | No data available   |

## **10. STABILITY AND REACTIVITY**

### **Reactivity**

No data available

### **Chemical stability**

Stable under recommended storage conditions

### **Materials to Avoid**

Strong oxidizing agents

### **Hazardous Decomposition Products**

No data available

### **Hazardous Polymerization**

No data available

## **11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

LD50 Oral - rat - > 5.000 mg/kg

### **Skin irritation and corrosion**

No data available

### **Serious eye damage / eye irritation**

No data available

### **Sensitization**

May cause allergic respiratory and skin reactions

### **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** No data available

**Specific target organ toxicity – repeated exposure** No data available

**Aspiration hazard** No data available

**Additional Information**

RTECS: YN507500

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver – Irregularities – Based on human evidence.

## 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**

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.

**Other adverse effects** No data available

## 13. DISPOSAL CONSIDERATIONS

**Product**

Observe all federal, state, and local environmental regulations. 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.

**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.