

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Thrombin**

Revision date: 14.01.2019

Product code: OR655503-1

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Thrombin

Product group: Endprodukt / Endproduct

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

In-vitro-Diagnostics

**1.3. Details of the supplier of the safety data sheet**

Company name:	Analyticon® Biotechnologies AG	
Street:	Am Mühlenberg 10	
Place:	D-35104 Lichtenfels	
Telephone:	+49 (0) 6454/7991-0	Telefax: +49 (0) 6454/7991-30
e-mail:	support@analyticon-diagnostics.com	
Contact person:	Zentrale	Telephone: +49 (0) 6454/7991-0
Internet:	http://www.analyticon-diagnostics.com	

**1.4. Emergency telephone number:**

Giftnotruf Mainz: +49 (0) 6131 / 19240

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

Thrombin

Signal word: Warning

Pictograms:

**Hazard statements**

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
9002-04-4	Thrombin			10-30%
	232-648-7			
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H315 H319 H317 H335			

Full text of H and EUH statements: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Move victim out of danger zone.

##### After inhalation

Move victim out of danger zone. In case of respiratory tract irritation, consult a physician.

##### After contact with skin

Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

##### After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

##### After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Causes mild skin irritation. Causes eye irritation. Causes tears. IF exposed: Cough

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

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

Thermal decomposition can lead to the escape of irritating gases and vapours.



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### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Wear suitable protective clothing and gloves.

### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Wear personal protection equipment.

### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Do not allow to enter into soil/subsoil.

### **6.3. Methods and material for containment and cleaning up**

Take up dust-free and set down dust-free.

Treat the recovered material as prescribed in the section on waste disposal.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Use only in well-ventilated areas.

The floor should be leak tight, jointless and not absorbent.

All work processes must always be designed so that the following is excluded:

inhalation. skin contact. Eye contact.

Avoid dust formation. Avoid contact with skin. Avoid contact with eyes.

#### **Advice on protection against fire and explosion**

Usual measures for fire prevention.

When using do not smoke.

#### **Further information on handling**

When using do not eat, drink, smoke, sniff.

### **7.2. Conditions for safe storage, including any incompatibilities**

#### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place.

#### **Further information on storage conditions**

Recommended storage temperature: of °C: 2 up to °C: 8

Protect against: heat. UV-radiation/sunlight.

### **7.3. Specific end use(s)**

This information is not available.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust at critical locations.

#### **Protective and hygiene measures**

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

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**Eye/face protection**

Eye protection: Tightly sealed safety glasses.

**Hand protection**

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Breakthrough times and swelling properties of the material must be taken into consideration.

**Skin protection**

Suitable protective clothing: Lab apron.

Footwear: Chemical resistant safety shoes.

**Respiratory protection**

Respiratory protection necessary at: insufficient ventilation. Handling larger quantities.

**Environmental exposure controls**

no restriction.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	solid
Colour:	white
Odour:	odourless
pH-Value:	No data available

**Changes in the physical state**

Flash point: No flash point - measurement carried out until boiling temperature.

**Explosive properties**

The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.

**Oxidizing properties**

Not oxidizing.

Water solubility: highly soluble.

**Solubility in other solvents**

buffer

**SECTION 10: Stability and reactivity****10.1. Reactivity**

The mixture is chemically stable under recommended conditions of storage, use and temperature.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions. Thermal decomposition

**10.4. Conditions to avoid**

Heat

**10.5. Incompatible materials**

Oxidizing agents, strong acids

**10.6. Hazardous decomposition products**

This information is not available.

**SECTION 11: Toxicological information**



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### 11.1. Information on toxicological effects

**Acute toxicity**

No information available.

**Carcinogenic/mutagenic/toxic effects for reproduction**

No information available.

**STOT-repeated exposure**

No information available.

**Aspiration hazard**

Coughing.

**Specific effects in experiment on an animal**

No information available.

**Additional information on tests**

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

## SECTION 12: Ecological information

### 12.1. Toxicity

No data available

### 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential

The product has not been tested.

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Other adverse effects

The product has not been tested.

**Further information**

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

**Land transport (ADR/RID)****Other applicable information (land transport)**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

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**Other applicable information (inland waterways transport)**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)****Other applicable information (marine transport)**

No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)****Other applicable information (air transport)**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): 1 - slightly water contaminating

**SECTION 16: Other information****Relevant H and EUH statements (number and full text)**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*