



MATERIAL SAFETY DATA SHEET

Date of preparation: 17.06.2004
Revision date: 01.06.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

BOVINE THROMBIN 100 (catalogue N° K-503)

BOVINE THROMBIN 100 is designed for Health Service laboratories. It serves as a complementary reagent for FIBRINOGEN KIT 10/30, meaning the concentration of fibrinogen.

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

Laboratory reagents. For professional use only.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

**PZ CORMAY S.A.
ul. Wiosenna 22
05-092 ŁOMIANKI**

phone/fax. (0-22) 751 79 10, 751 79 14

between: 8 am and 4 pm

e-mail: msds@cormay.pl

1.4. Emergency telephone number

Emergency telephone number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008 (CLP)

2.2. Label elements

The mixture does not require to be labeled as hazardous.

2.3. Other hazards

This mixture does not meet the criteria for PBT and vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

BOVINE THROMBIN 100

Thrombin Contains: < 5%

CAS number: 9002-04-4
EC number: 232-648-7
Index number: 647-014-00-9
Registration number: not available

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Eye Irrit. 2, H319
Skin Irrit. 2, H315
STOT SE 3, H335
Resp. Sens. 1, H334

Calcium chloride Contains: < 1%

CAS number: 10043-52-4
EC number: 233-140-8
Index number: 017-013-00-2
Registration number: not available

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Eye Irrit. 2, H319

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation remove exposed individual to fresh air. Call physician.
After skin contamination: wash off with plenty of water. Take off the contaminated clothing.
After contamination of eyes: rinse out with plenty of water for at least 15 minutes with the eyelid held wide open.
After consumption: give the individual, copious amounts of water to drink, if condition does not improve or becomes worse, consult physician immediately.

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

No data available.

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

No data available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

The mixture is non-flammable.
In the case of fire use extinguishing media suitable for materials stored in immediate vicinity. Water, CO₂, dry powder can be used as the extinguish media.
Not recommended extinguishing media: no data available

5.2. Special hazards arising from the substance or mixture

There is no data about hazardous substances which may occur during fire thermal decomposition of the mixture.

5.3. Advice for firefighters

The rescuers must be equipped with protective clothing and respiratory tract isolating equipment, irrespective of ambient air (in the case of large fire).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Avoid contamination with the preparation.
Notify the effected individuals of the emergency, to be aware of the issues associated.
Do not inhale vapours/ aerosols.
Secure the flow of fresh air into closed rooms.
Avoid contact of the mixture with skin and eyes.
Remove contaminated clothing and wash before reuse.

6.1.2. For emergency responders

Wear protective clothing and rubber gloves.

6.2. Environmental precautions

Dilute with plenty of water. Avoid entering the product into drains, surface water and groundwater, reservoirs and waterways.

6.3. Methods and material for containment and cleaning up

Collect small quantities with the use of an absorbing agent (sand, diatomite, acid binders, universal binders, sawdust), rinse with large amount of water if necessary. Provide material collected for recycling.

6.4. Reference to other sections

Use the control measures and personal protective equipment described in section 8 of this MSDS.
Refer to section 13 of this MSDS for adequate release measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

While working with the preparation, one should use appropriate means of personal protection (see pt. 8).
Avoid contact of the preparation with skin and eyes, as well as inhaling its mists.
Secure efficient local ventilation.

Industrial hygiene:

Eating, drinking or smoking of tobacco is prohibited while working with the preparation, except in places.
Wash your hands after work with the substance carefully with soapy water. Apply skin-protective barrier cream.

7.2. Conditions for safe storage, including any incompatibilities

In accordance with the norms generally accepted for chemicals in laboratories.
Store in original manufacturer containers.
Store in closed containers at temperatures compatible with the information provided on the label.
Protect against light.
Protect containers from damage.
Keep away from food and animal feed.

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Do not contain materials with occupational exposure limit values at workplace.

8.2. Exposure controls**8.2.1. Appropriate engineering controls**

No data available.

8.2.2. Individual protection measures, such as personal protective equipment

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

a) Eye / Face protection:

Avoid direct contact of the product with eyes, wear safety glasses.

b) skin protection:**- hand protection:**

Avoid direct contact of the product with skin, immediately take off clothes soiled with the preparation and wash contaminated skin with soapy water, use personal protective, clothing and gloves.

c) Respiratory protection:

Use reagent in well-ventilated rooms, avoid inhaling product mists, respiratory tract-protective agents are not required.

d) Thermal hazards:

Not applicable.

8.2.3. Environmental exposure controls

No data available.

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

	<u>BOVINE THROMBIN 100</u>
a) Appearance :- -The physical state : -Colour:	<i>solid</i> <i>white</i>
b) Odour:	<i>odourless</i>
c) Odour threshold :	<i>no data available</i>
d) pH:	<i>no data available</i>
e) Melting point/freezing point	<i>no data available</i>
f) Initial boiling point and boiling range	<i>no data available</i>

g) Flash point:	<i>no data available</i>
h) Evaporation rate:	<i>no data available</i>
i) Flammability (solid, gas)	<i>no data available</i>
j) Upper/lower flammability or explosive limits :	<i>no data available</i>
k) Vapour pressure :	<i>no data available</i>
l) Vapour density :	<i>no data available</i>
m) Relative density:	<i>no data available</i>
n) Solubility(ies)	<i>miscible with water</i>
o) Partition coefficient: n-octanol/water	<i>no data available</i>
p) Auto-ignition temperature	<i>no data available</i>
q) Decomposition temperature:	<i>no data available</i>
r) Viscosity :	<i>no data available</i>
s) Explosive properties:	<i>no data available</i>
t) Oxidising properties :	<i>no data available</i>

9.2. Other information

No other relevant information.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable in conditions provided by the manufacturer.

10.2. Chemical stability

The product is stable when normal handling in accordance with conditions provided by the manufacturer.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

The product is stable in conditions provided by the manufacturer. Avoid light and heat.

10.5. Incompatible materials

Not known.

10.6. Hazardous decomposition products

Not known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No data for the mixture. Toxicological problems should not be expected if the product were used and applied appropriately. The product should be handled with the care usual when dealing with chemicals.

a) acute toxicity:

Data for calcium chloride:

LD₅₀ (oral, rat) – 1000 mg/kg

LD₅₀ (dermal, rat) – 2630 mg/kg

b) irritation:

No data available.

c) corrosivity:

No data available.

d) sensitisation:

No data available.

e) repeated dose toxicity:

No data available.

f) carcinogenicity:

No data available.

g) mutagenicity:

No data available.

h) toxicity for reproduction:

No data available.

SECTION 12: Ecological information

12.1. Toxicity

Quantitative data on the ecological effect of this mixture are not available. Ecological problems should not be expected if you use and apply the mixture appropriately.

Ecotoxicity:

Data for calcium chloride:

Fish (*Lepomis macrochirus*) – LC₅₀ - 10650 mg/L – 96h

Crustacean (*Daphnia magna*) - EC₅₀ - 2400 mg/L – 48h

Further ecological data:

Prevent disposal into water, sewage or soil.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Chemical residues, in general, are included into special waste. Disposing of the latter is regulated by appropriate laws and ordinances. We recommend contacting the appropriate authorities, or waste disposal enterprises that will advise you on how to dispose of special waste.

Packing:

Remove in accordance with official regulations. Treat contaminated packages in the same way as the substance itself. If the regulations do not provide otherwise, non-contaminated packages can be treated like household waste or forward them to be utilized.

SECTION 14: Transport information**14.1. UN number**

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

No limits.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Material Safety Data Sheet was prepared in accordance with:**

Regulation (EC) No 1907/2006 of European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);

Regulation (EC) No 1272/2008 of the European Parliament and Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

15.2. Chemical safety assessment

Chemical safety assessment has been no carried out for the product.

SECTION 16: Other information

Full text of abbreviations and acronyms:

Skin Irrit. 2 - Skin irritation (category 2)

Eye Irrit. 2 - eye irritation (category 2)

STOT SE 3 - Specific target organ toxicity — single exposure (category 3)

Resp. Sens. 1 - Respiratory sensitization (category 1)

Text of H-code(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.

Methods of evaluating information for the purpose of classification: calculation method.

The foregoing information is based on the present state of our knowledge. It characterizes the product with respect to the appropriate safety measures. They do not guarantee the properties of the product.

We do not take responsibility for damage and losses that may result from inappropriate use of the mixture.

Reason of changes:

Changing the MSDS in accordance with Annex II to Commission Regulation (EU) No 453/2010.