

MATERIAL SAFETY DATA SHEET

1. <u>IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING</u>

Product identifiers

Product name: Heparin
Product number: P02-0010S8

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 INDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Label elements

The product does not need to be labeled in accordance with EC directives or respective national laws.

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

The product contains no substances, which at their given concentration, are considered to be hazardous to health.

4. FIRST AID MEASURES

If inhaled

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

Heparin P02-0010S8



In case of skin contact

Wash off with soap and plenty of water. If skin irritation persists, call a physician.

In case of eye contact

Flush eyes with water as a precaution. If eye irritation persists, consult a specialist.

If swallowed

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

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. FIREFEIGHTING 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

no data available

Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Use personal protective equipment.

Environmental precautions

Do not let product enter drains

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Store at -20° C in the dark. Keep container tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

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

impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) 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

Appearance Form: liquid Odour no data available **Odour Threshold** no data available no data available pН Melting point/freezing point no data available Initial boiling point and boiling range no data available Flash point does not flash **Evapouration rate** no data available Flammability (solid, gas) no data available Upper/lower flammability or explosive limits no data available no data available Vapour pressure Vapour density no data available Relative density no data available Water solubility soluble Partition coefficient: noctanol/water no data available **Auto-ignition 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

Stable under recommended storage conditions. **Chemical stability** Stable under normal conditions.

Possibility of hazardous reactions

Stable under normal conditions.

Conditions to avoid

no data available

Incompatible materials

Heparin P02-0010S8



Strong oxidizing agents

Hazardous decomposition products

No decomposition if stored normally

11. TOXICOLOGICAL INFORMATION

Acute toxicityno data availableSkin corrosion/irritationno data availableSerious eye damage/eye irritationno data availableRespiratory or skin sensitizationno data availableGerm cell mutagenicityno data available

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

Specific target organ toxicity - single exposure

Specific target organ toxicity - repeated exposure

Aspiration hazard

no data available
no data available
no data available

Potential health effects

Carcinogenicity

Inhalationno data available.Ingestionno data availableSkinno data available.Eyesno data available

Signs and Symptoms of Exposure

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

Additional Information RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

Persistence and degradability

Bioaccumulative potential

Mobility in soil

Results of PBT and vPvB assessment

Other adverse effects

no data available
no data available
no data available
no data available

13. <u>DISPOSAL CONSIDERATIONS</u>

Waste treatment methods

Product

Dispose of in accordance with local regulations. **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 or reverse side of invoice or packing slip for additional terms and conditions of sale.