

MATERIAL SAFETY DATA SHEET

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

Product identifiers

Product name: β -Mercapthoethanol 50 mM in PBS
Product number: P07-05020, P07-05100
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
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94501 Aidenbach
GERMANY
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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 sensitiser (Category 1), H317

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word: Warning

Hazard statements

H317: May cause an allergic skin reaction.

Precautionary statements

P302 + P350: IF ON SKIN: Wash with plenty of soap and water.
P273: Avoid release to the environment.
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention
P280: Wear protective gloves/ eye protection/ face protection.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.

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 name	CAS-Nr.	EG-Nr.	Content (weight %)
β -Mercaptoethanol	60-24-2	200-464-6	<1
Phosphate buffered saline	mixture	mixture	≥99

4. FIRST AID MEASURES

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Consult a physician.

Eye contact

Rinse immediately, also under the eyelids, with plenty of water for at least 15 minutes. Consult a physician.

Ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Consult a physician.

Inhalation

Remove person to fresh air. If not breathing, give artificial respiration. Consult a physician.

Notes to physician

Treat symptomatically.

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

Carbon oxides, Nitrogen oxides (NO_x).

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 vapours, mist or gas. Ensure adequate ventilation.

Methods for cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Environmental precautions

Do not let product enter drain.

7. HANDLING AND STORAGE

Handling

Always wear recommended personal protective equipment. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

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

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

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

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Form: Liquid
pH	No data available
BP/BP Range	No data available
MP/MP Range	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

Stability	Stable under recommended storage conditions.
Materials to avoid	No data available
Hazardous decomposition products	No data available
Polymerisation	Hazardous polymerisation does not occur.
Special hazards arising from the substance or mixture	
Carbon oxides, Nitrogen oxides (NO _x).	

11. TOXICOLOGICAL INFORMATION

Acute toxicity (b-mercaptoethanol >99%)

LD50 Oral – rat – 98 – 162 mg/kg

LC50 Inhalation – rat – 4h – 2 mg/L

LC50 Inhalation – rat – 4h – 625 ppm

LD50 Dermal – rabbit – 112 – 224 mg/kg

Skin corrosion/irritation

Conclusive but not sufficient for classification

Serious eye damage/eye irritation

Conclusive but not sufficient for classification

Respiratory or skin sensitisation

May cause sensitisation by skin contact.

Germ cell mutagenicity

Conclusive but not sufficient for classification

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: Not available

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

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish LC – Leuciscus idus (Golden orfe) – 46 – 100 mg/L – 96.0 h
Toxicity to aquatic invertebrates EC50 – Daphnia – 0.89 mg/L – 48 h
EC50 – Desmodesmus subspicatus (green algae) – 12 mg/L – 72 h
Toxicity to bacteria LC50 – Bacteria – 125 mg/L – 17 h

Persistence and degradability

Biodegradability 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

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non – recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

UN-number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Kein Gefahrgut 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

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

This safety datasheet complies with the requirements of Regulation (EG) Nr. 1907/2006

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

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.