

MATERIAL SAFETY DATA SHEET

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

Product identifiers

Product name: Insulin human rec.
Product number: P07-04200
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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Emergency telephone number

Emergency phone: +49-(0)8543-6016-30 or +49 151 51557123

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

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

Synonyms: rh-Insulin, Insulin

Formula: C₂₅₇H₃₈₃N₆₅O₇₇S₆

Molecular Weight: 5.808.00 g/mol

CAS-No.: 11061-68-0

EC-No.: 234-279-7

No components need to be disclosed according to the applicable regulation

4. FIRST AID MEASURES

After Inhalation

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

After Skin Contact

In case of contact, immediately wash skin with soap and copious amounts of water.

After Eye Contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

After Ingestion

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5. FIREFIGHTING MEASURES

Extinguishing Media

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Special Risks

Specific Hazard(s): Emits toxic fumes under fire conditions.

Special Protective equipment for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Conditions of Storage: Keep tightly closed. Store at -20 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

General Hygiene Measures

Wash thoroughly after handling.

Personal Protective Equipment

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.

Hand Protection: Protective gloves.

Eye Protection: Chemical safety goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Physical State: powder
pH	Not available
BP/BP Range	Not available
MP/MP Range	Not available
Flash Point	Not available
Flammability	Not available
Autoignition Temp	Not available
Oxidizing Properties	Not available
Explosive Properties	Not available
Explosion Limits	Not available
Vapor Pressure	Not available
Partition Coefficient	Not available
Viscosity	Not available
Vapor Density	Not available
Saturated Vapor Conc.	Not available
Evaporation Rate	Not available
Bulk Density	Not available
Decomposition Temp.	Not available
Solvent Content	Not available
Water Content	Not available
Surface Tension	Not available
Conductivity	Not available
Miscellaneous Data	Not available
Solubility	Not available

10. STABILITY AND REACTIVITY

Stability

Stable under recommended storage conditions.

Materials to Avoid: Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide.

Hazardous Polymerization

Will not occur

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Intravenous-rat- 145 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

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: NM8900250

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

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

UN-number

ADR/RID: -

IMDG: -

IATA: -

Un proper shipping name

ADR/RID: no dangerous goods

IMDG: no dangerous goods

IATA: no 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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No 1272/2008

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.