

MATERIAL SAFETY DATA SHEET

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

Product identifiers

Product name: TGF beta 3 human rec.
Product number: CB-1111151, CB-1111153, CB-1111154
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 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

TGF- β 3 human rec. produced in E. Coli is a disulfide-linked homodimeric, non-glycosylated, polypeptide chain containing two 113 amino acid chains and having a total molecular mass of 25.8kDa. The TGF- β 3 is purified by standard chromatographic techniques.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance

Skin contact

Wash off with soap and plenty of water. Call a physician.

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Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes. If symptoms persist, call a physician.

Ingestion

Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Inhalation

If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

Notes to physician

Treat symptomatically.

5. FIREFIGHTING MEASURES

Extinguishing Media

Suitable

Water spray, carbon dioxide, dry chemical powder, or alcohol resistant foam.

Special Risks

Specific Hazard(s)

Nature of decomposition products not known.

Special Protective equipment for firefighters

Wear self-contained breathing apparatus for fire fighting if necessary.

Further information

No data available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drain.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal

7. HANDLING AND STORAGE

Handling

Directions for Safe Handling: Avoid formation of dust and aerosols Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin, and clothing.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Store at -20°C

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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Physical State: solid
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
Materials to avoid	No information available
Hazardous decomposition Products	No information available
Polymerization	Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity

No data available

Principle routes of Exposure/Potential Health effects

Eyes May cause eye irritation of susceptible persons.

Skin No information available

Inhalation May cause irritation of respiratory tract.

Ingestion: May be harmful if swallowed.

Specific effects (Long term effects)

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Sensitization	No information available
Target organ Effects	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity effects	No information available
Mobility	No information available
Biodegradation	Inherently biodegradable
Bioaccumulation	Does not bioaccumulate

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

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.