


CellGenix GmbH	ZY-MS-1026a	Date: Dec 14, 2017
	<b>Material Safety Data Sheet</b> according to 1907/2006/EC recombinant human <b>Transforming Growth Factor-          beta 1</b>	Page 1 of 3

#### 01 Product and Company Identification

Product name: Transforming Growth Factor-beta 1 - recombinant human (TGF-β1)  
 Product number: 1426 (preclinical grade)  
 Brand name: CellGenix®

Company: CellGenix GmbH  
 Street: Am Flughafen 16  
 ZIP, Town, Country: 79108 Freiburg – Germany  
 Information: Customer Service  
 Emergency Call: **0049 761 88889 0**

#### 02 Hazards Identification

##### Classification according to Regulation (EC) No. 1272/2008

The substance is not classified according to the CLP regulation.

Hazard description: Not applicable.

Information concerning particular hazards for human and environment: Not applicable.

#### 03 Composition / Information on Ingredient

Substance: Transforming Growth Factor-beta 1, recombinant human (lyophilized) CAS #: n.a.  
 1% Mannitol (lyophilized) CAS #: 69-65-8

Hazards: No hazardous components contained

#### 04 First Aid Measures

**General information:** No special measures required.  
**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Generally the product does not irritate the skin.  
**After eye contact:** Rinse opened eye for several minutes under running water.  
**After swallowing:** If symptoms persist consult doctor.  
**Information for doctor:** No further relevant information available.

#### 05 Fire Fighting Measures


Extinguishing Media: Water spray, Carbon dioxide, dry chemical powder, appropriate foam  
 Advice for firefighters: **Protective equipment:** No special measures required.

#### 06 Accidental Release Measures

Precaution: Exercise appropriate precaution to minimize direct contact (skin, eyes, respiratory system).  
 Cleaning: Wipe up with damp sponge or mop. Disinfect area.  
 Environment protect: Wipe up if spilled.

#### 07 Handling and Storage

Handling: Avoid inhalation. Avoid contact with eyes, skin and clothes. Avoid repeated exposure.  
 Storage: Keep tightly closed. Store at -20 to -80 °C. Ship at ambient temperature.  
 Usage: Cell Culture component. For preclinical or clinical *ex vivo* use. Not intended for human *in vivo* application.

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## 08 Exposure Controls /Personal Protection

### Control parameters

Exposure limits: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls: Area ventilation is generally adequate.

### Personal Protective Equipment

Eye: Chemical safety goggles

Skin: Protective gloves as minimum hand protection (use Latex or Nitrile 0.1 mm)

General: Wash thoroughly after handling

## 09 Physical / Chemical Properties

Appearance / Physical State: solid powder (lyophilisate)

Color: White

Odor: no odor

Molecular Weight: ca. 25.6 kDa per homodimer

Melting point: n.a.                      Danger of explosion: none                      pH Value: n.a

Boiling point: n.a.                      Density: n.a.

Flash point: n.a.                      Solubility in H<sub>2</sub>O: soluble

Autoignition Temp: n.a.                      Flammability: n.a.

## 10 Stability and Reactivity

Stability: stable

Materials to avoid: strong oxidizing agents

Hazardous polymerization: will not occur

Hazardous decomposition products: nature of decomposition not known

## 11 Toxicological Information

This product is a potential irritant to eyes, respiratory system and skin. The product may also be harmful if ingested. Complete toxicological properties have not yet been determined. No sensitizing effects known till now.

## 12 Ecological Information

Persistence and degradability: No further relevant information available. No ecological effects expected. Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Behaviour in environmental systems: No ecological effects expected.

Bioaccumulative potential: No further relevant information available. No accumulative effects expected.


Mobility in soil: No further relevant information available.

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment: No known relevant substances obtained.

## 13 Disposal Considerations

Dispose of in accordance with local regulations. Small amounts can be diluted and disposed in the sink.

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#### 14 Transport Information

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<b>UN-Number</b> (ADR, ADN, IMDG, IATA):	Void
<b>UN proper shipping name</b> (ADR, ADN, IMDG, IATA):	Void
<b>Transport hazard class</b> (ADR, ADN, IMDG, IATA):	Void
<b>Packing group</b> (ADR, IMDG, IATA):	Void
<b>Environmental hazards (Marine pollutant):</b>	Void
<b>Special precautions for user:</b>	Void
<b>Transport in bulk</b> (Annex II of MARPOL73/78 and the IBC Code):	Void
<b>UN "Model Regulation":</b>	Void

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#### 15 Regulatory Information

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Chemical safety assessment: A Chemical Safety Assessment has not been carried out.  
 REACH/TSCA, NIOSH/OSHA,  
 MAK/AGS: No reportable substances

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#### 16 Other Information

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MSDS issued by: CellGenix GmbH, Regulatory Affairs

**Warranty:**

To the best of our knowledge, the information contained herein is accurate. However, neither CellGenix nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only ones that exist.