

# Material Safety Data Sheet

Version GHS 4.1  
Revision date : 03/14/2018

## 1 . PRODUCT & COMPANY IDENTIFICATION

**Product Name** : Transforming Growth Factor beta 1  
**Product Cat No** : CA903  
**CAS No** : None  
**Manufacturer/Supplier** : GenDEPOT LLC  
PO Box 454  
Barker, Tx 77413  
Emergency Phone : 866.417.0078  
Fax : 281-579-6876

## 2 . HAZARD IDENTIFICATION

### Emergency Overview

#### GHS Classification

Not a hazardous substance or mixture.

#### GHS Label elements, including precautionary statements

Not a hazardous substance or mixture

#### Hazards not other wise classified (HNOC) or not covered by GHS:

None

#### Potential Health Effects

Inhalation : May be harmful if inhaled, Causes respiratory tract irritation  
Skin : May be harmful if absorbed through skin. Cause skin irritation  
Eyes : Causes eye irritation  
Ingestion : May be harmful if swallowed.

## 3 . COMPOSITION/INFORMATION ON INGREDIENT

**Synonyms** : TGF-b1, TGF-beta-1, TGFB

No components needed to be disclosed according to the applicable regulations.

## 4 . FIRST AID MEASURES

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:** Wash off with soap and plenty of water.  
Consult a physician.

**In case of eye contact :** Flush eyes with water as a precaution.

**If swallowed :** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Note to Physician :** Treat symptomatically.

**Most Important Symptoms and effects, both acute and delayed**  
The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

**Indication of any immediate medical attention and special treatment needed**  
No data available.

## 5 . FIREFIGHTING MEASURES

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media:** No information available.

**Special hazards arising from the substance or mixture:** No data available.

**Advise for fire-fighters:** Wear self contained breathing apparatus for fire fighting if necessary.

**Further information:** No data available.

## 6 . ACCIDENTAL RELEASE MEASURES

**Personal precaution:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Use personal protection equipment. See section 8 for more detail.

**Environmental precaution:** Do not let product enter drains.

**Methods and materials for contaminant and cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections:** For disposal see section 13.

## 7 . HANDLING AND STORAGE

**Precaution for safe handling:** Provide appropriate exhaust ventilation at place at place where dust is formed. For precautions see section 2.

**Condition for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20°C

**Specific end use (s):** Apart from the use mentioned in section 1 no other specific uses are stipulated

## 8 . EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

### Exposure controls

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

### Personal protective equipment:

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. 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).

**Hand 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.

**Eye protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and 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. Complete suit protecting against chemicals.

## 9 . PHYSICAL AND CHEMICAL PROPERTIES

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

### Information on basic physical and chemical properties

Appearance	Lyophilized powder
pH	no data available
Melting point	no data available
Freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Decomposition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapor pressure	no data available
Density	no data available
Solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative density	no data available
Odor	no data available
Odor threshold	no data available
Evaporation rate	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available
Initial boiling point and Boiling range	no data available
Other safety information	no data available

## 10 . STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available.

### Condition to avoid

no data available.

### Incompatible materials

No data available

### Hazardous decomposition products

Other decomposition products - no data available

Hazardous decomposition products formed fire conditions - Oxides of phosphorus, Sodium oxides. In the event of fire: See section 5.

**11 . TOXICOLOGICAL INFORMATON****Acute Toxicity**

no data available

**Skin corrosion/irritation**

Conclusive but not sufficient for classification.

**Serious eye damage/eye irritation**

Conclusive but not sufficient for classification.

**Respiratory or skin sensitization**

Conclusive but not sufficient for classification.

**Mutagenicity (Germ cell mutagenicity)**

Conclusive but not sufficient for classification.

**Germ cell mutagenicity**

No data available

**Cacinogenicity**

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.

ACGIH : 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 ACGIH.

NTP : 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 NTP.

OSHA : 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 OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity— single exposure (GHS)**

No data available

**Specific target organ toxicity— repeated exposure (GHS)**

No data available

**Aspiration hazard**

No data available

**Additional information**

RTECS : not available

To the best of our knowledge, the chemical, physical, and toxicological

**12 . ECOLOGICAL INFORMATION****Toxicity**

No data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

Pbt/vPvB assessment not available as chemical safety assessment not required/ not conducted

**Other adverse effect**

no data available

**13 . DISPOSAL CONSIDERATIONS****Waste treatment methods****Product**

Offer surplus and non-recyclable to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

## 14 . TRANSPORT INFORMATION

### DOT-US

Not dangerous goods

### IMDG:

Not dangerous goods

### IATA:

Not dangerous goods

## 15 . REGULATORY INFORMATION

### United States

#### SARA 302 Components

SARA 302: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (Do minimis) reporting levels Established by SARA Title III, Section 313.

#### SARA311/312 Hazards

No SARA Hazards

### States Regulation

Massachusetts Right To Know Components

Pennsylvania Right To Know Components

New Jersey Right To Know Components

#### California Prop. 65 Components :

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### International Regulation

**Australia inventory (AICS):** Not determined.

**China inventory (IECSC):** All components are listed or exempted.

**Japan inventory:** Not determined.

**Korea inventory:** Not determined.

**Malaysia Inventory (EHS Register):** Not determined.

**New Zealand Inventory of Chemicals (NZIoC):** Not determined.

**Philippines inventory (PICCS):** Not determined.

**Taiwan inventory (CSNN):** Not determined.

## 16 . OTHER INFORMATION

### HIMS Rating:

Health hazard : 0

Flammability : 0

Physical hazards: 0

### NFPA Rating:

Health hazard : 0

Flammability : 0

Physical hazards: 0

This compound is sold only for research use by personnel familiar chemicals and who are well trained in good laboratory habits, such as avoiding spills, keeping hands clean at all times and no rubbing eyes with working in the laboratory.

This solution is sold only in microliter quantities for use in life sciences research. No other use is intended. And any other use may involve substantive hazards.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish or legally valid contractual relationship. GenDEPOT LLC, shall not be held liable for any damage resulting from handling of or from with above product. The burden of safe use of this material rests entirely with the user.

Since the conditions of handling, storage and disposal of this material are beyond our control, it is the responsibility of the user to determine whether the material is fit for a particular purpose and/or suitable for the user's method of use or application, and to determine safe conditions for use of the material, and to assume full responsibility for loss, injury and expense arising out of or in connection with the use of material. NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE MATERIAL DESCRIBED HEREIN SHALL BE CREATED BY OR INFERRED FROM ANY STATEMENT OR OMISSION FROM THIS MSDS.

Various government agencies and local authorities may have general or specific regulations applicable to the material which may not be covered in this MSDS. It is sole responsibility of the user to examine and confirm for its full compliance with any such regulations.

When the revision of this MSDS is received, please dispose of the old one.

Department issuing MSDS:  
GenDEPOT LLC  
Safety Department