

Safety Data Sheet

HUMAN RECOMBINANT TGF-BETA 3

EFFECTIVE DATE: 2017-04-26

1 Product and Company Identification

- 1.1 **Product Name:** Human Recombinant TGF-beta 3
- 1.2 **Product Identifier:** Ethyl alcohol 20%
- 1.3 **Catalog Number:** 78131, 78131.1, 78131.2
- 1.4 **Product Use:** Cell Culture
- 1.5 **Manufacturer/Supplier:** STEMCELL Technologies Inc.
Suite 500-1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada
- 1.6 **In Case of Emergency Call:** 1-800-667-0322

2 Hazards Identification

2.1 Classification of the substance or mixture

Carcinogenicity, Category 1A

2.2 Label elements

Pictogram



Signal word Danger

Hazard statement(s)

H350 May cause cancer.

Precautionary statement(s)

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P281 Use personal protective equipment as required.
- P308+313 IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

Toxic to aquatic life with long lasting effects
Harmful to aquatic life

3 Composition / Information on Ingredients

3.1 Substances

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
Ethyl alcohol	64-17-5	20%	200-578-6
Acetic acid	64-19-7	0.06	200-580-7

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4 First Aid Measures

4.1 Description of first aid measures

4.1.1 If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

4.1.2 In case of skin contact

Wash off with soap and plenty of water.

4.1.3 In case of eye contact

Flush eyes with water as a precaution. Consult a physician.

4.1.4 If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2.2 and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire Fighting Measures

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

5.1.2 Unsuitable Extinguishing Media

No data available

5.2 Special hazards arising from the substance or mixture

5.2.1 Flammable Properties and Hazards

No data available

5.2.2 Flash Pt

No data available

5.2.3 Autoignition Pt

No data available

5.2.4 Explosive Limits

LEL: No data available

UEL: No data available

5.2.5 Hazardous Combustion Products

Carbon oxides

5.3 Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
 For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

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

7 Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes or clothing.
 For precautions see section 2.2.

7.2 Conditions for safe storage

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

8 Exposure Controls/Personal Protection

8.1 Exposure limits

Component	CAS #	Value	Control parameters	Basis
Ethyl alcohol	64-17-5	TWA	1000 ppm	Alberta
		TWA	1880 mg/m ³	Alberta
		STEL	1000 ppm	British Columbia
		STEL	1000 ppm	Ontario
		TWA	1000 ppm	Quebec
		TWA	1880 mg/m ³	Quebec
		STEL	1000 ppm	USA. ACGIH TLV
		TWA	1000 ppm	USA. OSHA PEL
		TWA	1900 mg/m ³	USA. OSHA PEL
		IDLH	3300 ppm	USA. NIOSH IDLH
		TWA	1000 ppm	USA. NIOSH IDLH
		TWA	1900 mg/m ³	USA. NIOSH IDLH
		TWA	1000 ppm	UK
		TWA	1920 mg/m ³	UK
		STEL	3000 ppm	UK
		STEL	5760 mg/m ³	UK

8.2 Engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

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8.3 Personal protective equipment

8.3.1 Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

8.3.2 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.

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.3.3 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).

8.3.4 General hygiene considerations

General industrial hygiene practice.

8.3.5 Environmental exposure controls

No data available

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear liquid
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

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10.1 Reactivity	No data available
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No data available
10.4 Conditions to avoid	No data available
10.5 Incompatible materials	No data available
10.6 Hazardous decomposition products	No data available

11 Toxicological Information**11.1 Acute toxicity**

Oral:	Ethyl alcohol: LD50 - Rat - 7060 mg/kg
Inhalation:	Ethyl alcohol: LC50 - Rat - 124.7 mg/L - 4 h
Dermal:	No data available
Other:	No data available

11.2 Skin corrosion/irritation

No data available

11.3 Serious eye damage/eye irritation

No data available

11.4 Respiratory and/or skin sensitization

No data available

11.5 Germ cell mutagenicity

No data available

11.6 Carcinogenicity

IARC:	Group 1 Carcinogenic to humans (ethyl alcohol)
ACGIH:	Group A3 Confirmed animal carcinogen with unknown relevance to humans (ethyl alcohol)
NTP:	Known to be human carcinogens (ethyl alcohol)
OSHA:	Identified as a carcinogen or potential carcinogen (ethyl alcohol)

11.7 Reproductive toxicity

No data available

11.8 Specific target organ toxicity - single exposure

No data available

11.9 Specific target organ toxicity - repeated exposure

No data available

11.10 Aspiration hazard

No data available

11.11 Potential health effects

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

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11.12 Signs and symptoms of exposure

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

Target organ effects: Liver, respiratory system, eyes, skin, central nervous system, blood, reproductive system.

11.13 RTECS # No data available

12 Ecological Information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Component	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethyl alcohol 64-17-5	No data available	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flowthrough	No data available	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50

12.2 Persistence and degradability No data available

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil No data available

12.5 Other adverse effects No data available

13 Disposal Considerations

13.1 Waste disposal method

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

13.2 Contaminated packaging

Dispose of as unused product.

14 Transport Information

14.1 UN number No data available

14.2 UN proper shipping name

DOT	Not dangerous goods
ADR/RID	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

14.3 Transport hazard class(es) No data available

14.4 Packing group No data available

14.5 Environmental hazards No data available

14.6 Special precautions No data available

Safety Data Sheet**HUMAN RECOMBINANT TGF-BETA 3****EFFECTIVE DATE: 2017-04-26****15 Regulatory Information****15.1 USA****SARA 302 Components:**

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

SARA 313 Components:

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

SARA 311/312:

Chronic Health Hazard (Ethyl alcohol)

Massachusetts Right To Know Components

Component	CAS #	Revision Date
Ethyl alcohol	64-17-5	2007-03-01
Acetic acid	64-19-7	1993-04-24

Pennsylvania Right To Know Components

Component	CAS #	Revision Date
Ethyl alcohol	64-17-5	2007-03-01
Acetic acid	64-19-7	1993-04-24

New Jersey Right To Know Components

Component	CAS #	Revision Date
Ethyl alcohol	64-17-5	2007-03-01
Acetic acid	64-19-7	1993-04-24

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Component	CAS #	Revision Date
Ethyl alcohol	64-17-5	2007-03-01

15.2 EU

This SDS was prepared in accordance with Regulation (EC) No.1272/2008.

15.3 Canada

Not WHMIS controlled

This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

16 Other Information

16.1 Prepared by: Quality Control, STEMCELL Technologies Inc.

16.2 Revision: 1_0_0

16.3 Notice: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is

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current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.

16.4 Disclaimer: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.