

SAFETY DATA SHEET

Issuing Date: 04-Mar-2024

Version 1

Recombinant Human / Mouse TGF-β3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Recombinant Human / Mouse TGF-β3

Product code 800-07

Product Use Laboratory chemicals.

Distributed in the USA by
 FUJIFILM Irvine Scientific, Inc.
 2511 Daimler Street
 Santa Ana, CA 92705
 U.S.A.

SDSs are available at the following website(s): <http://www.irvinesci.com>

Company Phone Number Technical: 800-437-5706
 Fax: 949-261-6522

Emergency Telephone Transport-CHEMTREC Inside NA: 800-424-9300
 Transport-CHEMTREC Outside NA: 703-527-3887
 Transport-CANUTEC Inside Canada: 613-996-6666
 Medical Emergency (24 hour): 877-935-7387

E-mail fisitmrequest@fujifilm.com

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 3

GHS Label elements, including precautionary statements

Warning

Hazard Statements

Causes serious eye irritation
Flammable liquid and vapor

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/Bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical/ventilating/lighting/equipment

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not classified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Ethyl Alcohol	64-17-5	10-30%

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	Wash off immediately with plenty of water. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	If swallowed, do not induce vomiting - seek medical advice.

Most important symptoms and effects, both acute and delayed

May cause redness, itching, and pain.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). Dry chemical. Alcohol resistant foam.

Unsuitable Extinguishing Media

None known.

Specific hazards arising from the chemical

Flammable. Will be easily ignited by heat, sparks or flames.

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge Yes

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with skin, eyes or clothing. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Use personal protective equipment. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take precautionary measures against static discharges. Pay attention to flashback. Use only non-sparking tools. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Store at temperatures not exceeding 4 °C/ 39 °F. Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
Ethyl Alcohol	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³	

Appropriate engineering controls

Engineering Measures

Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tightly fitting safety goggles.

Skin and body protection

Wear protective gloves/clothing.

Respiratory protection

None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations

When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form

Colorless
Liquid

Physical state

Liquid

Odor	Not available	Odor Threshold	Not available
pH	No data available	Flash point	95 °F / 35 °C
Molecular Weight	Not available	Decomposition temperature	Not available
Autoignition temperature	Not available	Melting point / melting range	Not available
Boiling point / boiling range	Not available		
Freezing Point	Not available		
Flammability Limit in Air	Not available		
Oxidizing Properties	Not available	Explosive Properties	Not available
Solubility	Not available	Partition coefficient	Not available
Evaporation rate	Not available	Vapor Pressure	Not available
Vapor density	No data available	Density	Not available
VOC (lb/gal)	Not available	VOC (g/l)	Not available
Dynamic viscosity	Not available		

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight. Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Acute toxicity

Inhalation

Eyes

Skin

Ingestion

Non-irritating during normal use.

Irritating to eyes. May cause redness and tearing.

Non-irritating during normal use.

Ingestion may cause stomach discomfort.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol	= 7060 mg/kg (Rat)		= 116.9 mg/L (Rat) 4 h = 133.8 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	Irritating to eyes.
Corrosivity	No information available.
Sensitization	No information available.
Mutagenic Effects	No information available.
Reproductive Toxicity	No information available.
Carcinogenicity	Ingestion is not a likely route of exposure. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol	A3	Group 1	Known	

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)
Group 1: Carcinogenic to humans

NTP: (National Toxicity Program)
Known - Known Carcinogen

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Eyes.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 7087 mg/kg

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethyl Alcohol		LC50: 12.0 - 16.0mg/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)		LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation

Chemical name	Partition coefficient
Ethyl Alcohol	-0.35

Mobility

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Methods**

Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	Limited Quantity, Exempt from shipping papers
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TDG

Proper Shipping Name	ETHANOL
UN/ID No	UN1170
Transport hazard class(es)	3
Packing Group	III
Description	UN1170, Ethanol, 3, III

MEX

Proper Shipping Name	ETHANOL
UN/ID No	UN1170
Transport hazard class(es)	3
Packing Group	III
Description	UN1170, ETHANOL, 3, III

ICAO (air)

Proper Shipping Name	Ethanol
UN/ID No	UN1170
Transport hazard class(es)	3
Packing Group	III
Description	UN1170, Ethanol, 3, III

IATA

Proper Shipping Name	Ethanol
UN number or ID number	UN1170
Transport hazard class(es)	3
Packing group	III
Description	UN1170, Ethanol, 3, III

IMDG

UN proper shipping name	ETHANOL
UN number or ID number	UN1170
Transport hazard class(es)	3
Packing group	III
EmS-No	F-E, S-D
Description	UN1170, ETHANOL (ETHYL ALCOHOL), 3, III, Limited quantity

ADR

Proper Shipping Name	ETHANOL SOLUTION
UN number or ID number	UN1170
Transport hazard class(es)	3
Packing Group	III
Classification Code	F1
Marine pollutant	Yes
Description	UN1170, ETHANOL SOLUTION, 3, III, (D/E)
ADR/RID-Labels	3

ADN

Proper Shipping Name	Ethanol solution
UN/ID No	UN1170
Transport hazard class(es)	3
Packing Group	III
Classification Code	F1
Marine pollutant	Yes
Description	UN1170, Ethanol solution, 3, III
Hazard label(s)	3

Ventilation	VE01
Equipment Requirements	PP, EX, A

15. REGULATORY INFORMATION

International Inventories

TSCA	No
DSL/NDSL	No
PICCS	No
EINECS/ELINCS	No
ENCS	No
IECSC	No
KECL	No
AIICS	No

***Yes - All component(s) of this product are included or are exempt from listing on the inventory.**

***No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIICS - Australian Inventory of Industrial Chemicals

U.S. Federal Regulations

TSCA Sections 4, 5 and 12(b)

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Classification is shown in section 2 of this SDS.

Clean Water Act.

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65



WARNING: Cancer - www.P65Warnings.ca.gov; Reproductive Harm - www.P65Warnings.ca.gov

Chemical name	CAS No	California Prop. 65	Weight-%
Ethyl Alcohol	64-17-5	Carcinogen Developmental	10-30%

U.S. State Right-to-Know Regulations

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl Alcohol	X	X	X	X	

International Regulations

Canada - NDSL

This product does not contain any NDSL chemicals.

Mexico - Grade

No information available

Mexico - Carcinogen Status and Exposure Limits

Chemical name	Mexico	Exposure Limits
Ethyl Alcohol	A3	Mexico: STEL 1000 ppm

Other Regulations

No information available.

16. OTHER INFORMATION

NFPA	Health hazards 2	Flammability 2	Instability 0	Special hazards -
HMIS	Health hazards 2	Flammability 2	Physical hazards 0	Personal protection B

Prepared By FUJIFILM Environment, Health and Safety, phone: 800-473-3854

Revision Date 04-Mar-2024

Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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