

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Life Technologies

Identification of the substance or mixture

17904 **Product code Product name** Glycerol

Company/undertaking identification

Life Technologies Corporation 5781 Van Allen Way PO Box 6482 Carlsbad, CA 92008 +1 760 603 7200

5250 Mainway Drive Burlington, ONT CANADA L7L 6A4 800/263-6236 Thermo Fisher Scientific

Pierce Biotechnology P.O. Box 117 Rockford, IL 61105 **United States** 1.815.968.0747 or 1.800.874.3723

24 hour Emergency Response for Hazardous Materials Within the USA + Canada: 1-800-424-9300 and +1

[or Dangerous Goods] Incident. Spill, Leak, Fire, 703-527-3887

Exposure, or Accident. Call CHEMTREC Outside the USA + Canada: +1 703-741-5970

Country Specific Emergency Number (if available):

Use as laboratory reagent Scientific research and development

SECTION 2: Hazards identification

GHS - Classification

Signal Word WARNING

Hazard pictograms

None

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Health hazards

Serious eye damage/eye irritation Category 2B

Physical hazards

Not classified

Environmental hazards

Not classified

Hazard Statements

H320 - Causes eye irritation

Precautionary Statements

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash hands thoroughly after handling

Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

Storage

Not Applicable

Disposal

Not Applicable

Other hazards

Not Applicable

HMIS

| Health | 1 |
|--------------|---|
| Flammability | 0 |
| Reactivity | 0 |

SECTION 3: Composition/information on ingredients

| Component | CAS-No | EINECS-No | Weight % |
|--------------------------------|---------|-----------|----------|
| Glycerol 56-81-5 (98-100) | 56-81-5 | 200-289-5 | 98-100 |

We recommend handling all chemicals with caution.

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SECTION 4: First aid measures

Description of first aid measures

Skin contact Rinse with plenty of water. Immediate medical attention is not required.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

Ingestion Not expected to present a significant ingestion hazard under anticipated conditions

of normal use. If you feel unwell, seek medical advice.

Inhalation Not expected to be an inhalation hazard under anticipated conditions of normal

use of this material. Consult a physician if necessary.

Notes to Physician Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H320 - Causes eye irritation

Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

No information available.

Special hazards arising from the substance or mixture

Advice for fire-fighters

Standard procedure for chemical fires

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Always wear recommended Personal Protective Equipment
Use personal protection equipment
See Section 8 for more detail

Environmental precautions

No special environmental precautions required. .

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

Product code

See section 8 for more information.

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SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

Use as laboratory reagent. Scientific research and development.

SECTION 8: Exposure controls/personal protection

Control parameters

| Chemical Name | OSHA PEL | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|---------------|----------------------|--------------------|-----------------|------------------|
| Glycerol | 15 mg/m ³ | None | None | None |
| | 5 mg/m³ | | | |

| Chemical Name | Brazil - OEL - TWAs (LTs) | Brazil - OEL - Ceilings | Brazil - OEL - Skin Designations |
|---------------|---------------------------|-------------------------|----------------------------------|
| Glycerol | None | None | None |

Engineering measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection In case of insufficient ventilation wear respirators and components tested and

approved under appropriate government standards.

Hand protection Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

Eye protection Tight sealing safety goggles.

Skin and Body Protection Wear suitable protective clothing.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

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No special environmental precautions required. .

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SECTION 9: Physical and chemical properties

°F Mixture has not been tested

Product name Glycerol

Information on basic physical and chemical properties

Appearance liquid

Color clear Colourless

Odor odorless Melting point / melting range °C 18.17 °F 64.7 **Boiling point / boiling range** °C 290 **°F** 554

Flash point °C 177 °**F** 350.6 **Autoignition Temperature** °C Mixture has not been tested °F Mixture has not been tested

°C Mixture has not been tested

Decomposition temperature Evaporation rate No data available Flammability (solid, gas) Not Applicable

Upper explosion limit Mixture has not been tested Mixture has not been tested Lower explosion limit **Vapor Pressure** Mixture has not been tested Relative density Mixture has not been tested

Specific gravity No data available Solubility Soluble in water Partition coefficient: No data available

n-octanol/water

Explosive properties Mixture has not been tested

Other information No data available.

SECTION 10: Stability and reactivity

Reactivity None known.

Chemical stability Stable under normal conditions.

Possibility of hazardous

reactions

Hazardous reaction has not been reported.

Conditions to avoid No information available.

No dangerous reaction known under conditions of normal use. Incompatible materials

Hazardous decomposition

products

Product code

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No data available.

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SECTION 11: Toxicological information

Information on toxicological effects

| Chemical Name | LD50 (oral,rat/mouse) | LD50 (dermal,rat/rabbit) | LC50 (inhalation,rat/mouse) |
|---------------|-----------------------|--------------------------|-----------------------------|
| Glycerol | = 12600 mg/kg Oral | No data available | >570mg/m ³ (Rat) |

Principal Routes of Exposure

Mild eye irritation Irritation

Conclusive but not sufficient for classification Corrosivity

Sensitization Conclusive but not sufficient for classification

Conclusive but not sufficient for classification **STOT - Single Exposure**

STOT - Repeated Exposure Conclusive but not sufficient for classification

Conclusive but not sufficient for classification Carcinogenicity

Mutagenicity Conclusive but not sufficient for classification

Reproductive toxicity Conclusive but not sufficient for classification

Aspiration hazard Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Freshwater Algae Data | Water Flea Data | Freshwater Fish Species Data | Microtox Data | log Pow |
|---------------|--------------------------|--|---------------------------------|-------------------|-------------|
| Glycerol | No data available | Daphnia magna EC50>500 mg/L (24 h) | No data available | No data available | logPow-1.76 |

Persistence and degradability Inherently biodegradable.

Material does not bioaccumulate. Bioaccumulative potential

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

No information available. Other adverse effects

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

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SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

UN number
UN proper shipping name
Not Applicable
Transport hazard class(es)
Packing group
Not Applicable
Not Applicable

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Applicable.

SECTION 15: Regulatory information

| Component | US TSCA |
|--------------------|---------|
| Glycerol | Listed |
| 56-81-5 (98-100) | |

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations - Brazil

| <u>Chemical Name</u> | <u>CAS-No</u> | Brazil - National Agency for Sanitary Surveillance (ANVISA) | Brazil - National List of Carcinogen Agents to Humans (LINACH) |
|----------------------|---------------|---|--|
| Glycerol | 56-81-5 | Not Listed | Not Listed |

SECTION 16: Other information

Reason for revision SDS sections updated.

Revision number 2

Revision date 11-Dec-2018

Use as laboratory reagent. Scientific research and development.

References

- ECHA: http://echa.europa.eu/
- TOXNET: http://toxnet.nlm.nih.gov/
- eChemPortal: http://www.echemportal.org/
- LOLI database: https://www.chemadvisor.com/loli-database

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held

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liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet