



GLYCEROL (1,1,2,3,3-D5, 99%)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 20/06/2011

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Version: 5.1

DLM-1229

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

1.1. Product identifier

Product form	: Substance
Substance name	: GLYCEROL (1,1,2,3,3-D5, 99%)
EC-No.	: 200-289-5 (Unlabeled)
CAS-No.	: 62502-71-0
Product code	: DLM-1229
Formula	: (HOCD2)2CDOH
Synonyms	: 1,2,3-Propanetriol; Glycerine

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

GHS-US classification

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

No labeling applicable

GHS-US labeling

No labeling applicable

2.3. Other hazards

No additional information available

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
GLYCEROL (1,1,2,3,3-D5, 99%)	(CAS-No.) 62502-71-0 (EC-No.) 200-289-5 (Unlabeled)	100	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
GLYCEROL (1,1,2,3,3-D5, 99%)	(CAS-No.) 62502-71-0 (EC-No.) 200-289-5 (Unlabeled)	100	Not classified

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
GLYCEROL (1,1,2,3,3-D5, 99%) (Main constituent)	(CAS-No.) 62502-71-0	100	Not classified

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
First-aid measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash with soap and plenty of water. Consult a physician.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: Contact may cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Reactivity : Not available.

5.3. Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Do not let product enter drains.

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6.3. Methods and material for containment and cleaning up

For containment : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed in a cool, dry and well-ventilated place.
Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

GLYCEROL (1,1,2,3,3-D5, 99%) (62502-71-0)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ Upper Respiratory Tract irritation.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ See Appendix D - Substances with No Established RELs
USA OSHA	Remark (OSHA)	TWA 5 mg/m ³ - See Appendix D - Substances with No Established RELs

8.2. 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 : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.
Hand protection : Wear suitable protective clothing and gloves.
Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.
Environmental exposure controls : Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid
Molecular mass : 97.13 g/mol (Labeled)
Color : Colorless to Faint Yellow
Odor : Odourless
Odor threshold : No data available
pH : 5.5 - 8
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 20 °C (68 °F)
Freezing point : No data available
Boiling point : 182 °C (360 °F) at 27 hPa (20.0 mmHg)
Flash point : 160 °C (320 °F) - closed cup
Auto-ignition temperature : No data available

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Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 0.0033 hPa (0.0025 mmHg) at 50 °C (122 °F)
Relative vapor density at 20 °C	: 3.18 (Air = 1.0)
Relative density	: No data available
Specific gravity / density	: 1.25 g/ml at 20 °C (68 °F)
Solubility	: Water: soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: 2.7 - 19 % (V) at 1013 hPa (760 mmHg)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not available.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Not available.

10.5. Incompatible materials

Strong bases, Strong oxidizing agents

10.6. Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

GLYCEROL (1,1,2,3,3-D5, 99%) (62502-71-0)	
LD50 oral rat	12600 mg/kg
LD50 dermal rabbit	> 10000 mg/kg

Skin corrosion/irritation	: Skin - rabbit - Mild skin irritation - 24 h pH: 5.5 - 8
Serious eye damage/irritation	: Eyes - rabbit Result: Mild eye irritation 24.00 h pH: 5.5 - 8
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Prolonged or repeated exposure may cause: Nausea. Headache. Vomiting. Kidney - irregularities - Based on Human Evidence.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.

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Symptoms/effects after eye contact : Contact may cause eye irritation.
Symptoms/effects after ingestion : May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

GLYCEROL (1,1,2,3,3-D5, 99%) (62502-71-0)

LC50 fish 1	Carassius auratus (goldfish) - > 100,100 mg/l
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Avoid release to the environment. Disposal must be done according to official regulations.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Not dangerous goods.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

Special transport precautions : Not dangerous goods.

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14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

GLYCEROL (1,1,2,3,3-D5, 99%) (62502-71-0)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

GLYCEROL (1,1,2,3,3-D5, 99%) (62502-71-0)
Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

GLYCEROL (1,1,2,3,3-D5, 99%)(62502-71-0)	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	RTK - U.S. - Massachusetts - Right To Know List RTK - U.S. - New Jersey - Right to Know Hazardous Substance List RTK - U.S. - Pennsylvania - RTK (Right to Know) List

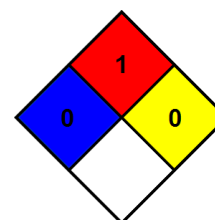
SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 0 Minimal Hazard - No significant risk to health

Flammability : 1 Slight Hazard

Physical : 0 Minimal Hazard

CIL Substance SDS

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