

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Propylene Glycol, 50%
CAS number	57-55-6
Synonyms	1,2-Propanediol; 1,2-Dihydroxypropane; Methyl Glycol (USP/FCC)

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

Identified uses	Laboratory Chemicals
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Specific target organ toxicity (single exposure) Category 3
Target Organs - Central nervous system (CNS).
Specific target organ toxicity - (repeated exposure) Category 2
Target Organs - Kidney, spleen, Blood.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word	Warning
Hazard statements	May cause drowsiness or dizziness May cause damage to organs through prolonged or repeated exposure
Precautionary statements	Prevention Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Response Get medical attention/advice if you feel unwell Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Storage Store in a well-ventilated place. Keep container tightly closed Store locked up Disposal Dispose of contents/container to an approved waste disposal plant

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
1,2-Propylene glycol	1,2-Propanediol	57-55-6	50%
Water	Water	7732-18-5	50%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Unsuitable extinguishing media No information available

5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Special 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.

5.4 Further information

Flash Point 99 °C / 210.2 °F

Autoignition Temperature 400 °C / 752 °F

Explosion limits

Upper 12.6 vol %

Lower 2.6 vol %

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

NFPA

Health	Flammability	Instability	Physical hazards
2	1	1	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

No information available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

Incompatibilities

No information available

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

No information available.

US. ACGIH Threshold Limit Values

No information available.

US. NIOSH: Pocket Guide to Chemical Hazards

No information available.

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

No information available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Viscous liquid
Appearance	Clear
Odor	Odorless
Odor Threshold	No information available
pH	6-8 100g/l aq. sol
Melting Point/Range	-60 °C / -76 °F
Boiling Point/Range	187 °C / 368.6 °F
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	12.6 vol %
Lower	2.6 vol %
Vapor Pressure	0.13 mbar @ 20 °C
Vapor Density	2.62 (Air = 1.0)
Density	1.03 - 1.04
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	400 °C / 752 °F
Decomposition Temp	No information available
Viscosity	45 mPa.s at 20 °C
Molecular Formula	C3 H8 O2
Molecular Weight	76.10
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available

10.2 Chemical stability

Hygroscopic

10.3 Possibility of hazardous reactions

None under normal processing

10.4 Conditions to avoid

Incompatible products. Excess heat. Exposure to moist air or water

10.5 Incompatible materials

Strong oxidizing agents, Acids

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,2-Propylene glycol	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	Not listed

Skin corrosion/irritation

Irritating to eyes and skin

Serious eye damage/eye irritation

Irritating to eyes and skin

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

Mutagenic effects have occurred in experimental animals.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
1,2-Propylene glycol	57-55-6	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Central nervous system (CNS)

Specific target organ toxicity - repeated exposure

Kidney spleen Blood

Reproductive toxicity

Experiments have shown reproductive toxicity effects on laboratory animals.

Chronic effects

No information available

11.2 Additional Information

Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS for complete information.

SECTION 12: Ecological information

12.1 Toxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
1,2-Propylene glycol	19000 mg/L EC50 = 96 h	51400 mg/L LC50 96 h 41 - 47 mL/L LC50 96 h 51600 mg/L LC50 96 h 710 mg/L LC50 96 h	710 mg/L EC50 Photobacterium phosphoreum 30 min	10000 mg/L EC50 > 24 h 1000 mg/L EC50 > 48 h

12.2 Persistence and degradability

Miscible with water Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

No information available

12.6 Endocrine disrupting properties

No information available

12.7 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15: Regulatory information

US federal

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable

CERCLA Hazardous Substance List (40 CFR 302.4)

Not applicable

SARA 304 Emergency release notification

Not applicable

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not applicable

SARA 311/312 Hazardous

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

SARA 313 (TRI reporting)

Not applicable

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not applicable

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not applicable

Safe Drinking Water Act

Not applicable

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing

Not applicable

US state regulations

US. Massachusetts RTK - Substance List

Not Listed

US. New Jersey Worker and Community Right-to-Know Act

Not Listed

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, 1,2-PROPANEDIOL (CAS #57-55-6).

California Proposition 65

This product does not contain any Proposition 65 chemicals

SECTION 16: Other information

Date of Issue: 9/26/2025

SECTION 17: Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.