

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Diethylene Glycol Monoethyl Ether
CAS number 111-90-0
Synonyms 2(2-Ethoxyethoxy)ethanol

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

Identified uses Laboratory chemicals.

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)

Serious Eye Damage/Eye Irritation Category 2

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

Causes serious eye irritation.

Precautionary statements

Prevention: Wash face, hands, and any exposed skin thoroughly after handling. Wear eye/face protection.

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.

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
Diethylene glycol monoethyl ether	2(2-Ethoxyethoxy)ethanol	111-90-0	98%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled

Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.

In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

In case of eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

If swallowed

Do NOT induce vomiting. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.

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 Water spray, Carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

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

Hazardous Combustion Products: Carbon monoxide (CO). Carbon dioxide (CO₂). Peroxides.

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 94 °C / 201.2 °F

Autoignition Temperature 204 °C / 399.2 °F

Explosion limits

Upper 23.5 vol %

Lower 1.20 vol %

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
1	1	1	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact with skin, eyes, or clothing.

6.2 Environmental precautions

Avoid release to 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

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes, or clothing. Avoid ingestion and inhalation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep in a dry, cool, and well-ventilated place. Keep container tightly closed. Keep under nitrogen.

Incompatibilities

Strong oxidizing agents. Strong acids. Acid anhydrides. Acid chlorides.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

None under normal use conditions.

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

No protective equipment is needed under normal use conditions.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical State	Liquid
Appearance	Colorless
Odor	Sweet
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-80 °C / -112 °F
Boiling Point/Range	197 °C / 386.6 °F @ 760 mmHg
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	23.5 vol %
Lower	1.20 vol %
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	204 °C / 399.2 °F
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	C6 H14 O3
Molecular Weight	134.17 g/mol
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

No information available.

10.2 Chemical stability

Stable under normal conditions. Hygroscopic.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products. Excess heat. Exposure to moisture.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), peroxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diethylene glycol monoethyl ether	6031 mg/kg (Rat)	9143 mg/kg (Rabbit) 4200 µL/kg (Rabbit) 6 mL/kg (Rat)	> 5240 mg/m ³ (Rat) 4h

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

Irritating to eyes.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Diethylene glycol monoethyl ether	111-90-0	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Diethylene glycol monoethyl ether	LC50	Pimephales promelas	11600 - 16700 mg/L, 96h flow-through
	LC50	Oncorhynchus mykiss	11400 - 15700 mg/L, 96h flow-through
	LC50	Lepomis macrochirus	10000 mg/L, 96h static 19100 - 23900 mg/L, 96h flow-through
	EC50	Daphnia magna	3940 - 4670 mg/L, 48h

12.2 Persistence and degradability

Persistence is unlikely.

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 (log Pow = -0.8).

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 regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Listed, Diethylene glycol monoethyl ether (CAS #111-90-0).

Other federal regulations

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

Listed, Diethylene glycol monoethyl ether (CAS #111-90-0).

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

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

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

Listed, Diethylene glycol monoethyl ether (CAS #111-90-0).

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

Listed, Diethylene glycol monoethyl ether (CAS #111-90-0).

California Proposition 65

Not listed.

SECTION 16: Other information

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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.