

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Di(ethylene glycol) ethyl ether
Product Number : W509043
Brand : Aldrich
Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : CARBITOL®
Diethylene glycol monoethyl ether
2-(2-Ethoxyethoxy)ethanol
Ethylidiglycol
Diethylene glycol ethyl ether
Formula : C₆H₁₄O₃
Molecular Weight : 134.17 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
2-(2-Ethoxyethoxy)ethanol			
111-90-0	203-919-7	-	-

3. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Target Organ Effect

Target Organs

Liver, Kidney

HMIS Classification

Health Hazard: 1

Chronic Health Hazard: *

Flammability: 1

Physical hazards: 0

NFPA Rating

Health Hazard: 1
Fire: 1
Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point 96 °C (205 °F) - closed cup

Ignition temperature 204 °C (399 °F)

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

hygroscopic

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
2-(2-Ethoxyethoxy)ethanol	111-90-0	TWA	25 ppm	2008-01-01	USA. Workplace Environmental Exposure Levels (WEEL)

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid, clear

Colour colourless

Safety data

pH no data available

Melting point no data available

Boiling point 202 °C (396 °F) - lit.

Flash point 96 °C (205 °F) - closed cup

Ignition temperature 204 °C (399 °F)

Lower explosion limit 1.2 %(V)

Upper explosion limit 23.5 %(V)

Vapour pressure 0.16 hPa (0.12 mmHg) at 20 °C (68 °F)

Density 0.999 g/mL at 25 °C (77 °F)

Water solubility soluble

Relative vapour density 4.63
- (Air = 1.0)

Evaporation rate 0.02

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

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

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

LD50 Oral - rat - 10,502 mg/kg

LC50 Inhalation - rat - > 200 mg/l

LD50 Dermal - rabbit - 9,143 mg/kg

Irritation and corrosion

Skin - rabbit - Mild skin irritation

Eyes - rabbit - Mild eye irritation

Sensitisation

no data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure

Nausea, Headache, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.
Target Organs	Liver, Kidney,

Additional Information

RTECS: KK8750000

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

no data available

Ecotoxicity effects

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 9,650 mg/l - 96 h
Toxicity to daphnia	LC50 - Daphnia magna (Water flea) - 3,340 mg/l - 48 h

and other aquatic invertebrates.

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

Target Organ Effect

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

	CAS-No.	Revision Date
2-(2-Ethoxyethoxy)ethanol	111-90-0	1995-01-01

SARA 311/312 Hazards

Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
2-(2-Ethoxyethoxy)ethanol	111-90-0	1995-01-01

New Jersey Right To Know Components

	CAS-No.	Revision Date
2-(2-Ethoxyethoxy)ethanol	111-90-0	1995-01-01

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information

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