

Butyldiglycol 112-34-5 MSDS

Name:	2-(2-Butoxyethoxy)-ethanol 99+% Material Safety Data Sheet
Synonym:	
CAS:	112-34-5

Section 1 - Chemical Product

MSDS Name: 2-(2-Butoxyethoxy)-ethanol 99+% Material Safety Data Sheet

Synonym:

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content
112-34-5	Diethylene glycol monobutyl ether	100.0

Hazard Symbols: XI

Risk Phrases: 36

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Irritating to eyes.

Potential Health Effects

Eye:

Causes eye irritation. May cause transient corneal injury.

Skin:

Causes skin irritation. May be absorbed through the skin.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage.

May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation.

Chronic:

May cause kidney injury. Repeated exposure may cause central nervous system damage. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), acidosis, and quick, shallow breathing.

Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. Get medical aid.

Notes to Physician:

Administration of Sodium bicarbonate may be of value to treat acidosis. Monitor kidney and liver function and arterial blood gases closely.

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustible liquid. Containers may explode when heated.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Cool containers with flooding quantities of water until well after fire is out.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Use with adequate ventilation. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat and flame. Keep away from sources of ignition.

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 112-34-5: Germany: 100 mg/m³ TWA Netherlands: 9 ppm MAC; 50 mg/m³

MAC Spain: 100 mg/m³ VLA-ED Personal Protective Equipment Eyes: 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:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: clear, colorless

Odor: Faint, mild, characteristic odor.

pH: Not available.

Vapor Pressure: .01 mm Hg @ 20 C

Viscosity: 6.16 MPA 20.00 deg

Boiling Point: 231 deg C @ 760.00mm Hg

Freezing/Melting Point: - 68.00 - - 0.00 deg

Autoignition Temperature: 227 deg C (440.60 deg F)

Flash Point: 100 deg C (212.00 deg F)

Explosion Limits, lower: .70 vol %

Explosion Limits, upper: 5.30 vol %

Decomposition Temperature:

Solubility in water: soluble

Specific Gravity/Density: .9670g/cm³

Molecular Formula: C₈H₁₈O₃

Molecular Weight: 162.23

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Ignition sources, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 112-34-5: KJ9100000 LD50/LC50:

CAS# 112-34-5: Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, eye: 20 mg/24H

Moderate; Oral, mouse: LD50 = 2400 mg/kg; Oral, mouse: LD50 = 6050 mg/kg; Oral, rabbit: LD50

= 2200 mg/kg; Oral, rat: LD50 = 5660 mg/kg; Oral, rat: LD50 = 4500 mg/kg; Skin, rabbit: LD50 = 2700 mg/kg.

Oral, rat: LD50 = 1746-10502 mg/kg Carcinogenicity:

Diethylene glycol monobutyl ether - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: Bluegill/Sunfish: LC50 = 1300 mg/L; 96 Hr.; Static conditions, 23 degrees C Fish: Goldfish:

LC50 = 2700 mg/L; 24 Hr.; Unspecified Water flea Daphnia: LC50 = 2850 mg/L; 24 Hr.;

Unspecified Goldfish, LC50=2700mg/24hr.; Atlantic silverside, TL50=2000ppm/96hr.

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36 Irritating to eyes.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection)

CAS# 112-34-5: 1

Canada

CAS# 112-34-5 is listed on Canada's DSL List.

CAS# 112-34-5 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 112-34-5 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A

