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

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>content</th>
</tr>
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<tbody>
<tr>
<td>112-34-5</td>
<td>Diethylene glycol monobutyl ether</td>
<td>100.0</td>
</tr>
</tbody>
</table>

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
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