

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Trade name	: Glycol Ether DB
Chemical name	: 2-(2-butoxyethoxy)ethanol
CAS-No.	: 112-34-5
Formula	: C8H18O3
Synonyms	: 2-(2-butoxyethoxy)ethanol / BDGE / butyl diglycol ether / butyldigol / DEGBE / diethylene glycol monobutyl ether / diethyleneglycol butyl ether / ethanol, 2-(2-butoxyethoxy)-
Other means of identification	: Solvent
BIG no	: 50482

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Solvent Laboratory chemical
Recommended use	: Industrial use
Restrictions on use	: None known

#### 1.3. Supplier

##### **ECOLINK**

2177 Flintstone Drive  
Suite A  
Tucker, GA 30084  
770-621-8240 (t)  
[www.ecolink.com](http://www.ecolink.com)

#### 1.4. Emergency telephone number

Emergency number : **INFOTRAC** 800-535-5053

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity (single exposure) Category 3	H336	May cause drowsiness or dizziness

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US)	: Warning
Hazard statements (GHS-US)	: H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness
Precautionary statements (GHS-US)	: P261 - Avoid breathing vapors, spray, mist, gas, fume, dust P264 - Wash hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear eye protection, face protection, protective clothing, protective gloves P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call Call a POISON CENTER or doctor/physician if you feel unwell P337+P313 - If eye irritation persists: Get medical advice/attention

# Glycol Ether DB

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Diethylene glycol monobutyl ether	(CAS-No.) 112-34-5	>=99.0	Eye Irrit. 2A, H319 STOT SE 3, H336
2-Butoxyethanol*	(CAS-No.) 111-76-2	<=0.5	STOT SE 3, H336

\* Impurity

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Consult a physician/ doctor if necessary. Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Show this safety data sheet to the doctor in attendance.
- First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : Immediately remove excess chemical and contaminated clothing; thoroughly wash contaminated skin with mild soap and water. If irritation persists after washing, seek medical attention. Thoroughly clean contaminated clothing before reuse; discard contaminated leather goods (gloves, shoes, belts, wallets, etc.).
- First-aid measures after eye contact : Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.
- First-aid measures after ingestion : If product is ingested, do NOT induce vomiting and contact a physician or Poison Control Center.

### 4.2. Immediate medical attention and special treatment, if necessary

Notes to physician

Symptoms : Aspiration may cause pulmonary edema and pneumonitis. Irritant effects. Central nervous system effects.

Hazards : May be harmful if swallowed and enters airways. May be harmful if swallowed. May be harmful in contact with skin. May be harmful if inhaled. Causes mild skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Treatment : Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : SMALL FIRE: Use dry chemicals, CO2, water spray or alcohol-resistant foam.  
LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.

Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

### 5.2. Specific hazards arising from the chemical

Fire hazard : Fight fire from maximum distance or use unmanned hose holder or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Reactivity : May form peroxides. Reacts violently with many compounds e.g. (some) acids/bases and (strong) oxidizers: (increased) risk of fire/ explosion.

# Glycol Ether DB

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas. Keep people away from and upwind of spill/ leak. Use personal protective equipment. Ensure adequate ventilation. Eliminate all sources of ignition.

Emergency procedures : Mark the danger area. No naked flames. Avoid contact with air. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water. Do not discharge product into the aquatic environment without pretreatment (biological treatment plant). Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain spill with dike to prevent entry into sewers or waterways.

Methods for cleaning up : For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not handle near heat, sparks, or flame. Avoid contact with incompatible agents. Use only with adequate ventilation/ personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded.

It is recommended that any liquid product exposed to air not be highly concentrated by evaporation without first assuring that no peroxide is present.

Alternatively, positive steps should be taken to reduce any accumulated peroxides to a safe level before concentrating the liquid.

Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Diethylene glycol monobutyl ether (112-34-5)		
ACGIH	ACGIH TWA (ppm)	10 ppm
2-Butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
NIOSH	NIOSH IDLH (ppm)	700 ppm
OSHA	OSHA TWA (ppm)	50 ppm 240 mg/m3

# Glycol Ether DB

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below the recommended exposure limits
- Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Materials for protective clothing:

- GIVE EXCELLENT RESISTANCE: butyl rubber. PVA. viton.
- GIVE GOOD RESISTANCE: chloroprene rubber. neoprene. nitrile rubber. tetrafluoroethylene.
- GIVE POOR RESISTANCE: PVC

#### Hand protection:

- Use chemical resistant gloves appropriate to conditions of use.
- Acid-resistant protective gloves

#### Eye protection:

- Safety glasses with side-shields

#### Skin and body protection:

- Appropriate protective clothing should be worn to prevent skin contact.

#### Respiratory protection:

- Full face mask with filter type A at conc. in air > exposure limit

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Color : Clear
- Odor : Faint butyl odor
- Odor threshold : No data available
- pH : 6 – 7.5
- Melting point : < -70 °C (1013 hPa)
- Boiling point : 228 - 234 °C
- Flash point : 105 - 114 °C
- Relative evaporation rate (butyl acetate=1) : < 0.01
- Flammability (solid, gas) : Not applicable.
- Vapor pressure : 0.027 hPa (20 °C)
- Relative vapor density at 20 °C : 5.6
- Relative density : 0.955 (20 °C)
- Relative density of saturated gas/air mixture : 1
- Specific gravity / density : 0.955 (20 °C)
- Molecular mass : 162.23 g/mol
- Solubility : Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in tetrachloromethane. Soluble in heptane. Soluble in oil.  
Water: 95.5 g/100ml (20 °C)
- Log Pow : 1 (Experimental value, Equivalent or similar to OECD 107, 20 °C)
- Auto-ignition temperature : 210 °C
- Decomposition temperature : No data available
- Viscosity, kinematic : 6.1 mm<sup>2</sup>/s
- Viscosity, dynamic : 6.5 mPa.s
- Explosion limits : 0.85 - 24.6 vol %  
LEL: 0.85 vol %  
UEL: 24.6 vol %

# Glycol Ether DB

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Explosive properties : Not explosive  
Oxidizing properties : Not considered an oxidizing agent

### 9.2. Other information

Specific conductivity : 125000 pS/m  
Saturation concentration : 0.2 g/m<sup>3</sup>  
VOC content : 0 %  
Other properties : Gas/vapor heavier than air at 20°C. Clear. Slightly volatile. Substance has neutral reaction. May generate electrostatic charges.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Will not occur.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with strong oxidizers, excessive heat, sparks or open flames.

### 10.5. Incompatible materials

Oxidizers, acids, alkalis.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Diethylene glycol monobutyl ether (112-34-5)

LD50 dermal rabbit	2764 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value)
ATE US (oral)	2410 mg/kg body weight
ATE US (dermal)	2764 mg/kg body weight

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

#### Diethylene glycol monobutyl ether (112-34-5)

Specific target organ toxicity – single exposure	May cause drowsiness or dizziness.
--	------------------------------------

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified  
Viscosity, kinematic : 6.1 mm<sup>2</sup>/s

Potential Adverse human health effects and symptoms : Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Practically non-toxic through skin (LD50 skin 2000/5000 mg/kg). Slightly irritant to skin. Slightly harmful by inhalation. Slightly irritant to respiratory organs. Causes serious eye irritation. Caution! Substance is absorbed through the skin.

Symptoms/effects : May cause drowsiness or dizziness.

# Glycol Ether DB

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/effects after inhalation	: Dry/sore throat.
Symptoms/effects after skin contact	: Slight irritation. Not irritating.
Symptoms/effects after eye contact	: Irritation of the eye tissue. Inflammation/damage of the eye tissue.
Symptoms/effects after ingestion	: AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Nausea. Vomiting. Headache. Dizziness. Drunkenness. Coordination disorders. Rapid respiration. Accelerated heart action. Low arterial pressure. Disturbances of consciousness. Decreased renal function.
Chronic symptoms	: No effects known.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	: Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photooxidation in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Not harmful to fishes. Groundwater pollutant. Slightly harmful to algae. Not harmful to bacteria. Not harmful to crustacea.

#### Diethylene glycol monobutyl ether (112-34-5)

LC50 fish 1	1300 mg/l (Equivalent or similar to OECD 203, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	4950 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

#### 12.2. Persistence and degradability

#### Diethylene glycol monobutyl ether (112-34-5)

Persistence and degradability	Readily biodegradable in water.
-------------------------------	---------------------------------

#### 12.3. Bioaccumulative potential

#### Diethylene glycol monobutyl ether (112-34-5)

Log Pow	1 (Experimental value, Equivalent or similar to OECD 107, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

#### 12.4. Mobility in soil

#### Diethylene glycol monobutyl ether (112-34-5)

Surface tension	27 mN/m (25 °C, 0.00212 mol/g)
Ecology - soil	Low potential for adsorption in soil.

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Do not discharge into surface water. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

# Glycol Ether DB

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not regulated

#### Transportation of Dangerous Goods

#### Transport by sea

#### Air transport

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Diethylene glycol monobutyl ether (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes	Health hazard - Serious eye damage or eye irritation Health hazard - Specific target organ toxicity (single or repeated exposure)
SARA Title III, Section 313 and 40 CFR 372	Reporting Threshold – 1.0%

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Glycol Ether DB	CAS-No. 112-34-5	<= 99%
-----------------	------------------	--------

##### 2-Butoxyethanol (111-76-2)

SARA Title III, Section 313 and 40 CFR 372 Reporting Threshold - 1.0%

#### 15.2. International regulations

##### CANADA

No additional information available

##### EU-Regulations

No additional information available

##### National regulations

No additional information available

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Glycol Ether DB (112-34-5)	New Jersey's Worker and Community – Right to Know Act

### SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 02/12/2018

# Glycol Ether DB

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases:

H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

NFPA health hazard

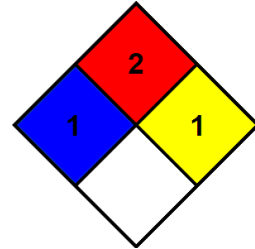
: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity

: 1 - Material that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



SDS US (GHS HazCom 2012)

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Please be advised revisions to the Safety Data Sheet (SDS) may require a label update. In no event shall ECOLINK be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ECOLINK has been advised of the possibility of such damages. The vendor assumes no responsibility for injury or damages resulting from the inappropriate alteration or manipulation of this SDS and its contents from that originally submitted by ECOLINK.*