

EC-SAFETY DATA SHEET

BUTYLDIGLYKOL

Version: 4.00

Revision Date 2006/06/26



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade name	BUTYLDIGLYKOL
Use	industrial use, raw material for washing and cleaning agents
Company	Hitech Chemicals

2. COMPOSITION/INFORMATION ON INGREDIENTS

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether

CAS-No.: 112-34-5

Index-No.: 603-096-00-8

EC-No.: 203-961-6

Classification:

Xi

R36;

For the full text of the R phrases mentioned in this Section, see Section 16.

3. HAZARDS IDENTIFICATION

Identification of the risks

Irritant Irritating to eyes.

4. FIRST AID MEASURES

General advice	If you feel unwell, seek medical advice (show the label where possible). Take off all contaminated clothing immediately.
Inhalation	Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration. Monitor breathing, give oxygen if necessary. Consult a physician.
Skin contact	Wash off with plenty of water.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion	Consult a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water spray, Dry powder, Foam, Carbon dioxide (CO2)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use personal protective equipment.
Environmental precautions	Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

HANDLING

EC-SAFETY DATA SHEET

BUTYLDIGLYKOL

Version: 4.00

Revision Date 2006/06/26



Safe handling advice Wear personal protective equipment.
Advice on protection against fire and explosion No special protective measures against fire required.

STORAGE

Requirements for storage areas and containers With exclusion of air/oxygen
Storage classification (VCI system/Germany): 10; Combustible liquids neither in Storage Class 3A nor 3B
container material unsuitable materials: Light metals

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Typ	Control parameters	Update	Basis
2-(2-BUTOXYETHOXY)ETHANOL 2-(2-BUTOXYETHOXY)ETHANOL	AGW	100 mg/m ³	01 2006	Germany TRGS 900

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

no data available

ENGINEERING MEASURES

If possible, use material transfer/filling, metering and blending plants that are closed.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection No personal respiratory protective equipment normally required. In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141.

Hand protection The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

gloves suitable for permanent contact:
Material: butyl-rubber
Break through time: >= 480 min
Material thickness: 0.4 mm

Eye protection Tightly fitting safety goggles

Skin and body protection Protective suit

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs.

Protective measures Avoid contact with eyes. Wear suitable gloves and eye/face protection.

EC-SAFETY DATA SHEET

BUTYLDIGLYKOL

Version: 4.00

Revision Date 2006/06/26



9. PHYSICAL AND CHEMICAL PROPERTIES

Form	liquid
Colour	colourless
Odour	characteristic
pH	20 °C; neutral
Melting point/range	-68 °C
Boiling point/range	228 - 233 °C; 1,013 hPa
Flash point	ca. 105 °C; DIN 51758
Ignition temperature	ca. 230 °C; DIN 51794
Lower explosion limit	0.7 %(V)
Upper explosion limit	5.3 %(V)
Vapour pressure	0.02 hPa; 20 °C
Density	0.952 - 0.955 g/cm ³ ; 20 °C
Water solubility	20 °C; completely miscible
Partition coefficient (n-octanol/water)	log Pow: 0.56
Viscosity, dynamic	5.85 mPas; 20 °C

10. STABILITY AND REACTIVITY

Hazardous decomposition products	No decomposition if stored normally.
Further information	Formation of peroxides may occur

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: LD50 rat: > 2,000 mg/kg; (literature value)
Acute dermal toxicity	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: LD50 rabbit: > 2,000 mg/kg; (literature value)
Skin irritation	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: rabbit: slightly irritating; (literature value)
Eye irritation	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: rabbit: highly irritating; (literature value)
Sensitization	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: Maximisation Test (GPMT) guinea pig: not sensitizing; (literature value)
Genotoxicity in vitro	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: Ames test: not mutagenic; (literature value)

12. ECOLOGICAL INFORMATION

Biodegradability	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: Readily biodegradable.; > 70 %; 28 d; OECD Test Guideline 301 E; (literature value)
	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: biodegradable; 100 %; 28 d; OECD Test Guideline 302 B; (literature value)

ECOTOXICITY EFFECTS

Toxicity to fish	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: LC50 Leuciscus idus: > 100 mg/l; (literature value)
Toxicity to daphnia	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether: EC50 Daphnia magna: > 100 mg/l; 48 h; (literature value)

EC-SAFETY DATA SHEET

BUTYLDIGLYKOL

Version: 4.00

Revision Date 2006/06/26



Toxicity to algae 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether:
EC50 Scenedesmus subspicatus: > 100 mg/l; (literature value)

13. DISPOSAL CONSIDERATIONS

Product Can be incinerated, when in compliance with local regulations.
waste code of the European Union: EWC The waste code must be determined in agreement with the regional waste disposal authority or company. A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose.

14. TRANSPORT INFORMATION

ADR Not dangerous goods
RID Not dangerous goods
ADNR Not dangerous goods
IMDG Not dangerous goods
ICAO/IATA Not dangerous goods

15. REGULATORY INFORMATION

LABELLING

Regulatory base 67/548/EEC
Regulatory list 67/548/EEC, ANNEX 1
Symbol(s) Xi: Irritant
R-phrases(s) R36: Irritating to eyes.
S-phrases(s) S24: Avoid contact with skin.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Additional advice EC Label

NATIONAL/OTHER REGULATIONS

Occupational restrictions Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

Directive 96/82/EC on the control of major-accident hazards involving dangerous substances list entry in the directive: Directive 96/82/EC does not apply

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2
R36 Irritating to eyes.

|| Indicates updated section.

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

EC-SAFETY DATA SHEET

BUTYLDIGLYKOL

Version: 4.00

Revision Date 2006/06/26

