

Material Safety Data Sheet

According to 91/155 EEC

Printing date 03.08.2006

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** Butyl Di Glycol

2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**
112-34-5 2-(2-butoxyethoxy)ethanol
- **Identification number(s)**
- **EINECS Number:** 203-961-6
- **EU Number:** 603-096-00-8

3 Hazards identification

- **Hazard description:**



Xi Irritant

- **Information concerning particular hazards for human and environment:**
R 36 Irritating to eyes.

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**
*Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.*

(Contd. on page 2)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 03.08.2006

Trade name: Butyl Di Glycol

(Contd. of page 1)

- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special requirement
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

UAE

(Contd. on page 3)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 03.08.2006

Trade name: *Butyl Di Glycol*

(Contd. of page 2)

9 Physical and chemical properties

· General Information

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic

· Change in condition

Melting point/Melting range:	-68°C
Boiling point/Boiling range:	224 - 234°C

· Flash point:	98°C
-----------------------	------

· Ignition temperature:	225°C
--------------------------------	-------

· Danger of explosion:	Product does not present an explosion hazard.
-------------------------------	---

· Explosion limits:

Lower:	0.9 Vol %
Upper:	5.9 Vol %

· Vapour pressure at 20°C:	0.1 hPa
-----------------------------------	---------

· Density at 20°C:	0.95 g/cm ³
---------------------------	------------------------

· Solubility in / Miscibility with water:	Fully miscible.
--	-----------------

· Viscosity:

Dynamic at 20°C:	6.16 mPas
-------------------------	-----------

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:

Oral	LD50	5660 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rabbit)

· Primary irritant effect:

- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

· General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

UAE

(Contd. on page 4)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 03.08.2006

Reviewed on 24.07.2006

Trade name: *Butyl Di Glycol*

(Contd. of page 3)

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulatory information

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**
Xi Irritant
- **Risk phrases:**
36 Irritating to eyes.
- **Safety phrases:**
2 Keep out of the reach of children.
24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Product safety department.
- **Contact:** Terminal Manager

UAE