



## Safety data sheet

Pursuant to guideline  
1907/2006

B-TEC H2O-CLEANER

Print date: 10.09.2015

Revised on: 10.09.2015

### 1 Identification of the substance/mixture and of the company

<b>Product name:</b>	<b>B-TEC H2O-CLEANER</b>
<b>Recommended use</b>	<b>Washing thinner, aqueous, <u>ready for use</u></b>
<b>Manufacturer/supplier</b>	B-TEC GmbH Zunftweg 6-8 D-31303 Burgdorf / Ehlershausen Tel: +49 (0)5085/97100-0 Fax: +49 (0)5085/97100-30 Germany
<b>Information provided by</b>	Management Board
<b>Contact E-mail</b>	Mr Bödrich info@btecsystems.de
<b>Emergency information</b>	Nord Poisons Centre University of Göttingen Pharmacology & Toxicology Robert-Koch-Str. 40 37075 Göttingen Germany Tel.: +49 (0)551/19240, Fax: +49 (0)551/3831881

### 2 Possible hazards

<b>Classification pursuant to Directive 67/548/EEC or Directive 1999/45/EEC</b>	none
<b>Additional hazards to people and the environment</b>	-
<b>Classification pursuant to Regulation (EC) 1272/2008</b>	none
<b>Hazard symbols</b>	
<b>Signal word</b>	
<b>Hazard statements</b>	-
<b>Safety information</b>	-

### 3 Composition of/information on ingredients

#### Chemical characterisation Hazardous ingredients

2-BUTOXYETHANOL

Percentage:  
<20%

CAS no.: 111-76-2

EINECS: 203-905-0

Registration no. (REACH): 01-2119475108-36-XXXX



R 20/21/22

R 36/38



Acute Tox. 4 (oral)

H 302

Acute Tox. 4 (inhalation – vapour)

H 332

Acute Tox. 4 (dermal)

H 312

Skin Irrit. 2

H 315

Eye Irrit. 2

H 319







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ISOPROPYL ALCOHOL	Percentage: < 1,5%
CAS no.: 67-63-0 EINECS: 200-661-7 Registration no. (REACH): 01-2119457558-25-XXXX	
	R 11
	R 36 R 67
	H 225
Flam. Liq. 2	H 225
	H 319
Eye Irrit. 2	H 319
STOT SE 3	H 336
TRIETHANOLAMINE	Percentage: < 1,5%
CAS no.: 111-76-2 EINECS: 203-905-0 Registration no. (REACH): 01-2119486482-31-XXXX	
No classification pursuant to CLP Regulation	
BLOCK POLYMER MADE OF ETHYLENE AND PROPYLENE OXIDE	
No classification pursuant to CLP Regulation	
ADDITIVES	

### 4 First aid measures

After inhalation	Ensure fresh air.
After contact with skin	Wash with water and soap, then rinse thoroughly. Re-lubricate skin if necessary.
After contact with eyes	Rinse immediately with water for at least 10 minutes with eyelid open. If symptoms persist, seek medical advice.
After ingestion	Rinse mouth with water. Do not induce vomiting. Seek medical advice.

### 5 Fire-fighting measures

Fire-fighting measures	Product is not flammable.
Extinguishing media	
- Suitable	Not applicable.
- Unsuitable	Not applicable.
Special protective equipment for fire fighters	-
Additional information	-

### 6 Accidental release measures

Personal precautions	Wear safety equipment (see Paragraph 8). Ensure sufficient ventilation.
Environmental precautions	Prevent penetration into soil, waterways and drainage systems.
Methods for cleaning up/taking up	Collect mechanically using absorbent material.



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### 7 Handling and storage

#### Handling

##### Precautions for safe handling

Wear gloves and eye protection.

Keep container tightly closed.

##### Precautions for protection against fire and explosion

Do not heat product.

#### Storage

##### Requirements for storage rooms and containers

Provide collecting room (Federal German Water Act [WHG/VAwS])

##### Storage compatibility notes

Store separately from very oxidising agents.

##### Further information on storage conditions

-

##### Storage class

12

##### Classification according to the Industrial Safety Regulation

-

[Betriebssicherheitsverordnung] (formerly Regulation Concerning Flammable Liquids [VbF])

### 8 Exposure controls/Personal protection

#### Occupational Exposure Limits (OEL) Germany

OEL: 2-Butoxyethanol: 98 mg/m<sup>3</sup> (Technical Rule for Hazardous Substances [TRGS] 900)

Peak limit: 4 (II)

OEL: Isopropyl alcohol: 500 mg/m<sup>3</sup> (Technical Rule for Hazardous Substances [TRGS] 900)

Peak limit: 2 (II)

Triethanolamine component:

Maximum Allowable Concentration: 5 mg/m<sup>3</sup> (respirable fraction)

Above-mentioned MAC no longer mentioned in TRGS 900.

However, use of these guidelines is recommended.

Execution to be selected on a workplace-specific basis and as a function of the concentration and quantity of the hazardous substance.

#### Personal protective equipment

##### - Respiratory protection

Fresh air ventilation.

##### - Hand protection

Chemical-resistant protective gloves, preferably of butyl (butyl rubber (EN 374)). Permeation butyl:  $\geq 480$  min

Penetration butyl: 60-120 min

Swelling butyl: conditionally resistant

Due to differences in quality, exact breakthrough times should be requested from the glove manufacturer.

Tightly fitting protective goggles.

##### - Eye protection

##### - Body protection

Wear protective clothing (pursuant to statutory accident insurance rule [BGR]189: Type 2).

Immediately change soiled or soaked clothing.

Separate storage of protective clothing.

##### - Workplace hygiene

Keep away from foodstuffs and beverages as well as animal feed. Comply with generally applicable hygienic regulations.

**DNEL values** (Derived No-Effect-Level)

No data available.

**PNEC values** (Predicted No-Effect-Concentration)

No data available.



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### 9 Physical and chemical properties

Physical state	Liquid
Colour:	Light blue
Odour:	Pleasantly fresh
Viscosity (dynamic, 20°C)	Not determined
Vapour pressure (20°C)	Not determined
Melting point/melting range	> 5°C
Boiling point/boiling range	~ 100°C
Ignition temperature	Not inflammable
Flash point	-
Explosion hazard	-
pH-value	~10.5
Density	~ 0.99 g/cm <sup>3</sup>
Solubility in/miscibility with water	Miscible

### 10 Stability and reactivity

Thermal decomposition/ conditions to avoid	None, if used appropriate.
Hazardous decomposition products	-

### 11 Toxicological information

Information on ingredients	<p>2-Butoxyethanol component: LD<sub>50</sub>: (rat, orally): 480 mg/kg LD<sub>50</sub>: (rabbit, dermally): 400 mg/kg</p> <p>Isopropyl alcohol component: LD<sub>50</sub>: 4570 mg/kg (rat, orally) LD<sub>50</sub>: 13400 mg/kg (rabbit, dermally) LC<sub>50</sub>: 4570 mg/kg/4h (rat, inhalation)</p> <p>Triethanolamine component: LD<sub>50</sub>: 9000 mg/kg rat, orally LD<sub>50</sub>: &gt;2000 mg/kg rabbit, dermally</p> <p>Block polymer component: LD<sub>50</sub>: (rat, orally): &gt;2000 mg/kg [calculated]</p>
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Toxicology notes	<p>The toxicological classification of the preparation was undertaken on the basis of the calculation method employed in the Preparations Directive (1999/45/EC). According to the manufacturer's expectations, no hazards in addition to those identified on the labelling are expected, yet skin absorption cannot be completely ruled out.</p>
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### 12 Ecological information

<b>Water hazard class</b>	1, slightly hazardous for water (self-classification pursuant to Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes [VwVwS] dated 17/05/1999)
<b>Information on ingredients</b>	<p>2-Butoxyethanol component:            Acute fish toxicity LC50 (96 hours): 1700 mg/l (Oncorhynchus mykiss)            Daphnia toxicity LC50 (48 hours): 1815 mg/l (Daphnia magna)            Algae toxicity EC50 (72 hours): 911 mg/l (Scenedesmus capricornutum)</p> <p>Isopropyl alcohol component:            Acute fish toxicity LC50 (48 hours): 8970 mg/l (Leuciscus idus).            Daphnia toxicity EC50 (24 hours): &gt;1000 mg/l (Daphnia magna)            Algae toxicity IC50 (72 hours): &gt;1000 mg/l (Scenedesmus subspicatus)</p> <p>Triethanolamine component:            Fish toxicity: LC50: &gt;10000 mg/l/96h (leuciscus idus)            Daphnia toxicity EC50: 1,920 mg/l/24h (Daphnia magna)</p> <p>Block polymer component:            Fish toxicity: LC50: &gt; 100mg/l/96h (leuciscus idus) [analogy]</p>
<b>Persistence and degradability</b>	Product contains no organic halogens (AOX).
<b>Bioaccumulation potential</b>	All individual components are biodegradable. Log P(o/w): <3 [of all components] Due to the distribution coefficient n-octanol/water, it is not expected to accumulate in organisms.
<b>Determination of PTB characteristics</b>	No data available.

### 13 Disposal considerations

<b>Product recommendation</b>	Contact manufacturer
<b>Waste key</b>	Allocation of the waste key according to the Closed Substance Cycle Waste Management Act [Kreislaufwirtschafts- / Abfallgesetz] is dependent on the manner in which the waste producer is used. This can be discussed with the relevant authorities.
<b>Uncleaned packaging recommendation</b>	Return to supplier for recycling.



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### 14 Transport information

**Land transport ADR/RID and Hazardous Waste Road Directive/Hazardous Waste Railway Directive [GGVS/GGVE]** Not a hazardous substance within the meaning of ADR

- ADR/RID-Hazardous Waste Road/Railway Directive class

- Packaging group

- Kemler number

- UN number

- Description of goods

**Maritime transport IMDG/Maritime Ordinance on Hazardous Materials [GGVSee]**

- IMDG/GGVSee class

- Page

- UN number

- Packaging group

- EMA number

- MFAG

- Proper technical name

**Air transport ICAO-TI and IATA-DGR**

- ICAO/IATA class

- UN/ID number

- Package number

- Proper technical name

**Comment**

### 15 Regulatory information

**Classification pursuant to Directive 67/548/EEC or Directive 1999/45/EEC** The product must not be labelled.

**Code letter (symbols 67/548/EEC / 1999/45/EC)** -

**R Phrases** -

**S Phrases** -

**Classification pursuant to Regulation (EC) 1272/2008** The product must not be labelled.

**Code letter (symbols regulation (EC) 1272/2008)**

**Signal word**

**H Phrases** -

**P Phrases** -

**EU regulatory information**

This Product meets the criteria which is defined in the EG-detergents-regulation 648/2400.

**Safety assessment**

Safety assessments were not carried out for substances of this preparation.

**National regulatory information**

**Water hazard class**

Class 1 (slightly hazardous to water), according to VwVwS, attachmend 4

**Major Accidents Ordinance [Störfallverordnung] (12th Federal Immission Control Ordinance [BImSchV])**

Ingredients not listed by name.

**Classification according to the Industrial Safety**

**Regulation [Betriebssicherheitsverordnung]**

**(formerly Regulation Concerning Flammable Liquids**

**[VbF])**

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**Solvent Ordinance [VOC] (31st Federal Immission Control Ordinance)**      VOC content: 5 - 20%

**Special for constructions / machines for cleaning surfaces : 31st BImSchV (VOC) annex III, 2.1**      followed

### 16 Other information

**Other applicable EC Directives**      Preparations Directive (199/45/EC), last amended by Directive 2006/8/EC.  
Substances Directive (67/548/EEC), last amended by Directive  
2006/121/EC. REACH Regulation (EC) no. 1907/2006.

**Recommended restriction of use**      Only for commercial / industrial use.

**Risk statements and hazard statements referred to (Section 2, 3)**

R11: Highly flammable.  
R36: Irritating to eyes.  
R67: Vapours may cause drowsiness and dizziness.  
R36/38: Irritating to eyes and skin.  
R20/21/22: Harmful if inhaled, in contact with skin and if swallowed.

H319: Causes serious eye irritation.  
H315: Causes skin irritation.  
H312: Harmful in contact with skin.  
H332: Harmful if inhaled.  
H302: Harmful if swallowed.  
H225: Highly flammable liquid and vapour.  
H336: May cause drowsiness or dizziness.

**Changes with respect to last version**      Adjustment in accordance with REACH Regulation (EC) no.  
1907/2006



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For additional information, please refer to the data sheets:

BGV A 5: Accident Prevention Regulation First Aid

A 008: Personal protective equipment [Persönliche Schutzausrüstungen]

ZH 1/566 "Data sheet on explosion protection measures in solvent cleaning plants" [Merkblatt für Explosionsschutz-Maßnahmen an Lösemittel-Reinigungsanlagen]

BGR 180 "Handling solvents" [Umgang mit Lösemitteln] (previously ZH 1/562)

BGR 189 "Rules for the use of protective clothing" [Regeln für den Einsatz von Schutzkleidung] (previously ZH 1/105)

BGR 190 "Rules for the use of respiratory protection equipment" [Regeln für den Einsatz von Atemschutzgeräten] (previously ZH 1/701)

BGR 192 "Use of eye and face protection" [Benutzung von Augen- und Gesichtsschutz] (previously ZH 1/703)

BGR 195 "Rules for the use of protective gloves" [Regeln für den Einsatz von Schutzhandschuhen] (previously ZH 1/706)

BGR 197 "Use of skin protection" [Benutzung von Hautschutz] (previously ZH 1/708)

BGI 536 "Hazardous chemical substances" [Gefährliche chemische Stoffe] (formerly M 051)

BGI 546 "Handling hazardous substances" [Umgang mit Gefahrstoffen]

BGI 595 "Irritating substances/corrosive substances" [Reizende Stoffe/Ätzende Stoffe] (formerly M 004)

BGI 621 "Solvents" [Lösemittel] (formerly M 017)

BGI 623 "Transfer of liquids" [Umfüllen von Flüssigkeiten]

BGI 660 "General occupational safety measures for the handling of hazardous substances" [Allg. Arbeitsschutzmaßnahmen für den Umgang mit Gefahrstoffen] (formerly M 053)

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

All information is based on our present state of knowledge. The purpose of the safety data sheet is to convey essential physical, safety, toxicological and ecological data for the handling of chemical substances and preparations. The data sheet does not establish a contractual relationship.