

Revi	e name : sion date : of print :	bio-chem VC 23.02.2012 13.03.2012	200	Version (Revision) :	1.0.0 (1.0.0)		
1.	Identificatio	n of the substa	ance/mixture a	and of the company/undertaking	J		
1.1	Product iden bio-chem VC 200						
1.2	Relevant ide	ntified uses of	f the substance	or mixture and uses advised ag	ainst		
	Relevant id	entified uses eaning products					
1.3	-	• •	he safety data	shaat			
	Supplier	ce Technology Gmb	-				
	Street : Ber						
		/city: 33334 (Gütersloh				
		+49 5241 94430					
	Telefax : +						
		contact : lab	or@bio-circle.de				
1.4		elephone Nun	-				
		1 during normal off					
2.	Hazards ider	ntification					
2.1	Classification of the substance or mixture						
	Classification	on according to	o Directive 67/	548/EEC or 1999/45/EC			
2.2	Label eleme	nts					
	Labelling (67/548/EEC or 1999/45/EC)						
	Special provisions concerning the labelling of certain mixtures						
	101Safety data sheet available for professional user on request.						
	Additional information The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC)						
	No.648/2004 of	n detergents.	reparation comply wi	th the biodegradability criteria as laid down in	Regulation (EC)		
2.3	Other hazard	ls					
	None						
3.	Composition	/information	on ingredients				
.	Mixtures						
3.2	Mixtures Hazardous ingredients						
	Hazardous ingredients BUTYL CELLOSOLVE ; EC No : 203-905-0; CAS No. : 111-76-2						
	Weight fraction	,	1 - 5 %	-			
	Classification 6		Xn; R20/21/22 Xi				
		.272/2008 [CLP] :	Eye Irrit. 2 ; H319	2 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skir	1 Irrit. 2 ; H315		
	ALCOHOLS, C12 Weight fraction	, ,	O) ; EC No : 932-106-0 1 - 5 %	6; CAS No. : 68439-50-9			

 Weight fraction :
 1 - 5 %

 Classification 67/548/EEC :
 N ; R50 Xi ; R41

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Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Aquatic Acute 1 ; H400

Additional information

Full text of R-, H- and EUH-phrases: see section 16.

4. First aid measures

4.1 Description of first aid measures After inhalation Remove casualty to fresh air and keep warm and at rest. In case of skin contact After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin. After eye contact After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. After ingestion Rinse mouth immediately and drink plenty of water. Call a physician immediately. 4.2 Most important symptoms and effects, both acute and delayed No information available. 4.3 Indication of any immediate medical attention and special treatment needed None 5. **Firefighting measures** 5.1 Extinguishing media Suitable extinguishing media Water Foam. Extinguishing powder. Carbon dioxide (CO2). Sand. Nitrogen. Extinguishing blanket 5.2 Special hazards arising from the substance or mixture In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2). Sulphur oxides 5.3 Advice for firefighters Wear a self-contained breathing apparatus and chemical protective clothing. 6. **Accidental release measures** 6.1 Personal precautions, protective equipment and emergency procedures Special danger of slipping by leaking/spilling product. 6.2 Environmental precautions Do not allow to enter into surface water or drains. Before discharge into sewage plants the product normally needs to be neutralised. 6.3 Methods and material for containment and cleaning up Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Wash with plenty of water. 6.4 Reference to other sections Treat the recovered material as prescribed in the section on waste disposal.

7. Handling and storage

7.1 Precautions for safe handling



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Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities Keep/Store only in original container. Protect against Frost. Hints on storage assembly Storage class : 12 7.3 Specific end use(s)

None

8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

BUTYL CELLOSOLVE ; CAS No. : 111-76-2

Limit value type (country of origin) : Limit value :	TRGS 900(D) 20 ppm / 98 mg/m ³
Peak limitation :	4(II)
Remark :	H,Y
Version:	02.07.2009
Limit value type (country of origin) :	STEL (EC)
Limit value :	50 ppm / 246 mg/m ³
Remark :	Н
Version :	08.06.2000
Limit value type (country of origin) :	TWA (EC)
Limit value :	20 ppm / 98 mg/m ³
Remark :	Н
Version:	08.06.2000

Biological limit values

BUTYL CELLOSOLVE ; CAS No. : 111-76-2

Limit value type (country of origin): TRGS 903 (D) Parameter: Butoxy acetic acid / Urine (U) / at longterm exposure: after several previous shifts Limit value: 100 mg/l Version : 31.03.2004

8.2 Exposure controls

Personal protective equipment Eye / face protection



Wear suitable safety goggles in case of splash. **Suitable eye protection** Safety goggles acc. EN 166.

Skin protection

Hand protection



Wear protective gloves in case of longer lasting skin contact.

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Suitable gloves type : EN 374.

Suitable material : NBR (Nitrile rubber).

Breakthrough time (maximum wearing time) : 480 min.

Thickness of the glove material : 0.4 mm

Remark : The exact break trough time has to be requested from the protective glove manufacturer and limits has to be ensured.

General health and safety measures

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately.

8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Safety relevant basis data

Physical state :			liquid		
Colour :			clear		
Odour :			none		
Boiling temperature / boiling .	r ange (1013 hPa)	ca.	98	°C	
Flash point :			not applicable		
Vapour pressure :	(50 °C)		not applicable		
Density :	(20 °C)	ca.	1	g/cm ³	
Solvent separation test :	(20 °C)		not applicable		
pH value :		ca.	9		
Flow time :	(20 °C)		none		DIN-cup 4
Maximum VOC content (DE) :			4	Wt %	
Maximum VOC content (Switzerland) :			4	Wt %	
0.11					

9.2 Other information

None

10. Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

No information available.

10.3 Possibility of hazardous reactions

No information available. **10.4 Conditions to avoid**

No information available.

10.5 Incompatible materials No information available.

10.6 Hazardous decomposition products No information available.

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11. Toxicological information

11.1 Information on toxicological effects

Irritant and corrosive effects

slightly irritant but not relevant for classification.

11.4 Additional information

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

12. Ecological information

12.1 Toxicity

No information available.

12.2 Persistence and degradability

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge. With the disposing into sewage systems ensure a neutral pH-value of the medium.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment No information available.

12.6 Other adverse effects

No information available.

12.7 Further ecological information

None

13. Disposal considerations

The waste codes are recommendations based on the schedule use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances.

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes / waste designations according to EWC / AVV

Waste code product

20 01 30 detergents other than mentioned in 20 01 29

Waste code packaging

15 01 02 plastic packages

Waste treatment options

Appropriate disposal / Package

Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner as the medium.

14. Transport information



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14.1 UN number

No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name No dangerous good in sense of this transport regulation.
14.3 Transport hazard class(es) No dangerous good in sense of this transport regulation.
14.4 Packing group No dangerous good in sense of this transport regulation.
14.5 Environmental hazards

No dangerous good in sense of this transport regulation.

14.6 Special precautions for user None

15. Regulatory information

^{15.1} Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Water hazard class (WGK) Class : 1 (Slightly hazardous to water) Classification according to VwVwS Other regulations, restrictions and prohibition regulations VbF-Class : NU hemical safety assessment

15.2 Chemical safety assessment

No information available.

16. Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

None

- 16.3 Key literature references and sources for data None
- ^{16.4} Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008 [CLP] None

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Special rules for supplemental label elements for certain mixtures

EUH210 Safety data sheet available on request.

16.5 Relevant R-, H- and EUH-phrases (Number and full text)

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.



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H332	Harmful if inhaled.				
H400	Very toxic to aquatic life. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes and skin. Risk of serious damage to eyes.				
20/21/22					
36/38					
41					
50	Very toxic to aquatic organisms.				
16.6 Training advice					
None					

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.