

* Butylglycolacetaat Date revised: 14.04.2016

1006840 Version: 7 / WORLD Master No. M-111 Print date: 27.01.17

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Butylglycolacetaat

REACH-Registration no. 01-2119475112-47-XXXX

Use of the substance/mixture

Solvents

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified Uses

At the moment we have no information available for the identified uses. In the presence of these data will be included in the safety data sheet.

Uses advised against

There are no uses have been identified, advised against.

1.3. Details of the supplier of the safety data sheet

Address

Vivochem B.V.

Darwin 5

7609 RL Almelo

Telephone no. +31 546 577774 Fax no. +31 546 577701 Information provided Dept. Quality

by / telephone

E-mail address kwaliteit@vivochem.nl

1.4. Emergency telephone number

National poisoning information center (NVIC) +31 (0) 30 274 8888

Only for the purpose of informing medical personnel in cases of accidental intoxications.

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4 H302 Acute Tox. 4 H312 Acute Tox. 4 H332

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Warning

Hazard statements ***

H312 Harmful in contact with skin.



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H302 Harmful if swallowed. H332 Harmful if inhaled.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264.1 Wash hands thoroughly after handling.

P270 Do no eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P312 Call a POISON CENTER or doctor if you feel unwell. P501.9 Dispose of contents/container as problematic waste.

2.3. Other hazards

PBT and vPvB

You find the results of PBT and vPvB assessment in section 12.

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous ingredients

2-Butoxyethyl acetate

CAS No. 112-07-2 EINECS no. 203-933-3

REACH-Registration 01-2119475112-47-XXXX

no.

Concentration >= 98 %

Acute Tox. 4 H302 Acute Tox. 4 H312 Acute Tox. 4 H332

Complete text of R/H-phrases in Chapter 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If the patient is likely to become unconscious, place and transport in stable sideways position. Remove soiled or soaked clothing immediately, do not allow to dry. Poisonous symptoms can first be observed after several hours, there- fore medical observation for at least 48 hours is necessary.

After inhalation

Ensure supply of fresh air. In the event of symptoms take medical treatment.

After skin contact

Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Take medical treatment.

4.2. Most important symptoms and effects, both acute and delayed

The following symptoms may occur: Shortness of breath, Headache, Dazyness, Disorientation, Excitement, Vomiting, CNS depression, Tiredness

Repeated and prolonged skin contact may lead to defatting and irritation of the skin. Risk of pneumonia



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4.3. Indication of any immediate medical attention and special treatment needed

Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Dry powder, Water spray jet, Alcohol-resistant foam

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2)

5.3. Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away sources of ignition. Keep unprotected persons away. Use personal protective clothing.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Ensure adequate ventilation. When picked up, treat material as prescribed under Section 13 "Disposal".

6.4. Reference to other sections

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Observe the usual precautions for handling chemicals. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid formation of aerosols. Do not discharge into surface waters/groundwater.

Take off immediately all contaminated clothing. Avoid contact with skin and eyes. Keep seperated from food-stuffs and feed-stocks. At work do not eat, drink, smoke or take drugs. Wash hands before breaks and after work. Do not inhale gases/vapours/aerosols.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Earthing necessary during loading operations. Use only explosion-proof equipment. The product vapours are heavier than air. Vapours can form an explosive mixture with air.

7.2. Conditions for safe storage, including any incompatibilities

Temperature class T2

Keep container in a cool, well-ventilated place. Do not use containers, lines etc. made of copper or copper alloys.

Do not store together with: Oxidising agents, Alkalis



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storage category TRGS 510 10 Combustible liquid Keep container tightly closed and dry in a cool, well-ventilated place.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Derived No/Minimal Effect Levels (DNEL/DMEL)

2-Butoxyethyl	acetate
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2-Duloxyelliyi acei	ale			
DNEL Conditions Concentration	Worker 102	Acute mg/kg	dermal	Acute effects
DNEL Conditions Concentration	Worker 775	Acute mg/m³	inhalative	Acute effects
DNEL Conditions Concentration	Worker 333	Acute mg/m³	inhalative	Local effects
DNEL Conditions Concentration	Worker 102	Long term mg/kg/d	dermal	Chronic effects
DNEL Conditions Concentration	Worker 133	Long term mg/m³	inhalative	Chronic effects
DNEL Conditions	General Population	Acute	dermal	Systemic effects
Concentration	27	mg/kg/d		
DNEL Conditions	General Population	Acute	inhalative	Systemic effects
Concentration	499	mg/m³		
DNEL Conditions	General Population	Acute	oral	Systemic effects
Concentration	18	mg/kg/d		
DNEL Conditions	General Population	Acute	inhalative	Local effects
Concentration	166	mg/m³		
DNEL Conditions Concentration	General Population 36	Long term mg/kg/d	dermal	Systemic effects



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DNEL

Conditions General Long term inhalative Systemic effects

Population

Concentration 67 mg/m³

DNEL

Conditions General Long term oral Systemic effects

Population

Concentration 4,3 mg/kg/d

Predicted No Effect Concentration (PNEC)

2-Butoxyethyl acetate

Type of value PNEC
Type Freshwater

Concentration 0,304 mg/l

Type of value PNEC Saltwater

Concentration 0,0304 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 2,03 mg/kg TG

Type of value PNEC

Type Marine sediment

Concentration 0,203 mg/kg TG

Type of value PNEC Type Soil

Concentration 0,68 mg/kg TG

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 90 mg/l

8.2. Exposure controls

Respiratory protection in accordance with DIN EN 136 / DIN EN 140 / DIN EN 143 / DIN EN 149

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Short term: filter apparatus, Filter A

Hand protection in accordance with DIN EN 374

Appropriate Material Butyl rubber

Material thickness >= 0,4 mm Breakthrough time >= 480 min

Eye protection in accordance with DIN EN 166

Tightly fitting safety glasses

Body protection in accordance with DIN EN 465

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties



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Appearance				
Form	liquid			
Colour	colourless			
Odour	ester-like			
Odour threshold				
Value	0,1	to	0,5	ppm
Value	0,67	to	3,33	mg/m³
pH value				
Value	4			
Concentration/H2O	1	%		
Temperature	20	°C		
Melting point/freezing point				
Value	-64			°C
Initial boiling point and boilir	ng range			
Value	192,3			°C
Pressure	1013	hPa		
Flash point				
Value	78			°C
Evaporation rate				
Remarks	No data available)		
Flammability (solid, gas)				
No data available				
Upper/lower flammability or	exnlosive limits			
Lower explosion limit	1,7			%(V)
Upper explosion limit	8,4			%(V) %(V)
Vapour pressure	σ, .			/ (()
Value	0,5			hPa
Temperature	20	°C		ПГа
Source	Literature value	Ü		
Vapour density				
Value	5,5			
Relative density	0,0			
	0.04			a/om3
Value Temperature	0,94 20	°C		g/cm³
•	20	J		
Solubility(ies)	4 E			a/I
Value Temperature	15 20	°C		g/l
Partition coefficient: n-octan		C		
log Pow Temperature	1,51 20	°C		
The possibility of bioaccum		C		
Auto-ignition temperature	alation is slight.			
Value	280			°C
	200			C
Decomposition temperature	Ma da W		d ==	لد م دائد
Remarks	No decomposition	n it use	a as presc	ribed.
Viscosity				
Remarks	No data available)		
Provide a face of a contract to a				

Explosive properties



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Remarks This product is not potentially explosive.

Oxidising properties

evaluation not oxidizing

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Under normal conditions of storage and use, hazardous reactions will not occur.

10.2. Chemical stability

Under normal conditions of storage and use is the product stable.

10.3. Possibility of hazardous reactions

Reactions with oxidizing agents. Vapours can form an explosive mixture with air. Protect from exposure to air/oxygen (peroxide formation).

10.4. Conditions to avoid

Protect from heat/overheating. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Reactions with strong oxidising agents. copper, Alkalis, Aluminium

10.6. Hazardous decomposition products

Hazardous determin decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

There is no data available on the product apart from the information given in this subsection.

Acute oral toxicity (Components)

2-Butoxyethyl acetate

Species	Rats (male/female)	
LD50	1880	mg/kg
Method	OECD TG 401	
Species	rat (male)	
NOAEL	< 69	mg/kg
Duration of exposure	90 d	
Method	OECD 408	
Species	rat (female)	
NOAEL	< 82	mg/kg
Duration of exposure	90 d	
Method .	OECD 408	

Acute dermal toxicity (Components)

2-Butoxyethyl acetate

rabbit			
	1500		mg/kg
rabbit			
>	150		mg/kg
	90	d	
		1500 rabbit > 150	1500 rabbit > 150

Acute inhalative toxicity (Components)

2-Butoxyethyl acetate

Species Rats (male/female)



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LC 0 > 400 ppm(V)
Duration of exposure 4 h

Method OECD 403
Species rat (female)

NOAEC < 31 ppm(V)

Duration of exposure 14 Weeks

Species rat (male)

NOAEC 62,5 ppm(V)

Duration of exposure 14 Weeks Species mouse (female)

NOAEC < 31 ppm(V)

Duration of exposure 14 Weeks

Species mouse (male)
NOAEC 62,5 ppm(V)

Duration of exposure 14 Weeks

Skin corrosion/irritation

evaluation slight irritant effect - does not require labelling

Serious eye damage/irritation

evaluation slight irritant effect - does not require labelling

Sensitization (Components)

2-Butoxyethyl acetate

No sensitizing effect known.

Mutagenicity (Components)

2-Butoxyethyl acetate

Not considered mutagenic based on several in vitro and in vivo studies.

Carcinogenicity (Components)

2-Butoxyethyl acetate

Indications of possible carcinogenic effects are not available.

Reproduction toxicity (Components)

2-Butoxyethyl acetate

No indications of reproduction toxicity are available.

Specific Target Organ Toxicity (STOT)

Repeated exposure

Route of exposure oral

Species Rats (male/female)

LOAEL 94 mg/kg

Repeated exposure

Route of exposure dermal Species rabbit

LOAEL 203 mg/kg

Repeated exposure

Route of exposure inhalative

Species Rats (male/female)

LOAEL 206 mg/kg

Aspiration hazard

No information available.

SECTION 12: Ecological information

12.1. Toxicity

There is no data available on the product apart from the information given in this subsection.



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Fish toxicity (Components)

2-Butoxyethyl acetate

Species rainbow trout (Oncorhynchus mykiss)
LC50 28 mg/l

Duration of exposure 96 h

Method OECD 203

Daphnia toxicity (Components)

2-Butoxyethyl acetate

Species Crassostrea gigas

EC50 > 100 mg/l

Duration of exposure 24 h Remarks Static system

Species Static system

Species Daphnia magna

EC50 37 mg/l

Duration of exposure 48 h Method DIN 38412 T.11

Remarks Static system
Species Ceriodaphnia Dubia

EC10 30,4 mg/l

Duration of exposure 7 d
Remarks Semistatic system

Algae toxicity (Components)

2-Butoxyethyl acetate

Species Pseudokirchneriella subcapitata

EC50 1570 mg/l

Duration of exposure 72 h

Method ISO 8692 Remarks Static system

Species Pseudokirchneriella subcapitata

EC0 300 mg/l

Duration of exposure 72 h

Method ISO 8692 Remarks Static system

Bacteria toxicity (Components)

2-Butoxyethyl acetate

Species Pseudomonas putida

EC10 720 mg/l

Duration of exposure 17 h
Method DIN 38412 / Part 8
Remarks Static system
Species Pseudomonas putida

EC50 960 mg/l

Duration of exposure 17 h
Method DIN 38412 / Part 8
Remarks Static system

12.2. Persistence and degradability

Biodegradability (Components)

2-Butoxyethyl acetate

Value 88 %

Duration of test 28 d evaluation readily degradable



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12.3. Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow 1,51 Temperature 20 °C

The possibility of bioaccumulation is slight.

12.4. Mobility in soil

Slightly mobile in soils

12.5. Results of PBT and vPvB assessment

Evaluation of persistance and bioaccumulation potential

The Substance do not meets PBT-criterions. The Substance do not meets vPvB-criterions.

12.6. Other adverse effects

Behaviour in environment compartments

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information

Land transport ADR/RID

Non-dangerous goods

14.1. UN number 14.2. UN proper shipping

name

14.3. Transport hazard

class(es)

14.4. Packing group -

14.5. Environmental hazards

14.6. Special precautions for user

ecautions for No information available.

14.7. Transport in bulk

according to Annex II of

MARPOL73/78 and the IBC

Code

Marine transport IMDG/GGVSee

The product does not constitute a hazardous substance in sea transport.

14.1. UN number

14.2. UN proper shipping

name

14.3. Transport hazard

class(es)

14.4. Packing group

No information available.



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14.5. Environmental hazards

14.6. Special precautions for No information available.

user

14.7. Transport in bulk No information available.

according to Annex II of MARPOL73/78 and the IBC

Code

Air transport ICAO/IATA

The product does not constitute a hazardous substance in air transport.

14.1. UN number -

14.2. UN proper shipping

name

14.3. Transport hazard -

class(es)

14.4. Packing group -14.5. Environmental hazards -

14.6. Special precautions for

user

14.7. Transport in bulk

according to Annex II of MARPOL73/78 and the IBC

Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No information available.

No information available.

SVHC

The product does not contain substances of very high concern (SVHC).

Other regulations, restrictions and prohibition regulations

Observe employment restrictions for child bearing mothers and nursing mothers.

Observe employment restrictions for young people.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H332 Harmful if inhaled.

CLP categories listed in Chapter 3

Acute Tox. 4 Acute toxicity, Category 4

Department issuing safety data sheet

Department product safety

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.



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