

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : CB 100 LR
Revision date : 10.07.2019
Print date : 10.07.2019

Version (Revision) : 3.0.0 (2.0.0)

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

1.1 Product identifier

CB 100 LR

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

Relevant identified uses

PC 35 - Washing and cleaning products

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

Bio-Circle Surface Technology GmbH

Street : Berensweg 200

Postal code/city : 33334 Gütersloh

Telephone : +49 5241 9443 0

Telefax : +49 5241 9443 44

Information contact : labor@bio-circle.de

1.4 Emergency telephone number

+49 5241 9443 51 during normal office hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

None

2.2 Label elements

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.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; REACH registration No. : 01-0000016977-53-XXXX ; CAS No. : 164462-16-2

Weight fraction : $\geq 1 - < 5 \%$

Classification 1272/2008 [CLP] : Met. Corr. 1 ; H290

2-(2-BUTOXYETHOXY)ETHANOL ; REACH registration No. : 01-2119475104-44-XXXX ; EC No. : 203-961-6; CAS No. : 112-34-5

Weight fraction : $\geq 1 - < 5 \%$

Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319

Additional information

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

SECTION 4: First aid measures

4.1 Description of first aid measures

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General information

When in doubt or if symptoms are observed, get medical advice.

Following 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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Extinguishing powder Carbon dioxide (CO₂) Sand Nitrogen Extinguishing blanket

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon dioxide (CO₂) Carbon monoxide

5.3 Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

The product itself does not burn. Adapt extinguishing measures to suit the environment.

SECTION 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. Do not allow to enter into soil/subsoil.

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. Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed.

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7.2 Conditions for safe storage, including any incompatibilities

Keep/Store only in original container. Protect against Frost

Hints on joint storage

Storage class (TRGS 510) : 12

7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 10 ppm / 67 mg/m³
Peak limitation : 1,5(l)
Remark : Y
Version : 07.06.2018

Limit value type (country of origin) : STEL (EC)
Limit value : 15 ppm / 101,2 mg/m³
Version : 31.01.2018

Limit value type (country of origin) : TWA (EC)
Limit value : 10 ppm / 67,5 mg/m³
Version : 31.01.2018

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL worker (local) (ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)

Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 40 mg/m³

Limit value type : DNEL worker (local) (ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)

Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 4 mg/m³

Limit value type : DNEL worker (systemic) (ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)

Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 40 mg/m³

Limit value type : DNEL worker (systemic) (ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)

Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 40 mg/m³

Limit value type : DNEL worker (local) (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)

Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 67,5 mg/m³

Limit value type : DNEL worker (local) (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)

Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 101,2 mg/m³

Limit value type : DNEL worker (systemic) (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)

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Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 67,5 mg/m³
Limit value type : DNEL worker (systemic) (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 20 mg/kg

PNEC

Limit value type : PNEC (Aquatic, freshwater) (ALANINE N,N-BIS(CARBOXYMETHYL), - TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)
Exposure route : Water (Including sewage plant)
Limit value : 2 mg/l
Limit value type : PNEC (Aquatic, marine water) (ALANINE N,N-BIS(CARBOXYMETHYL), - TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)
Exposure route : Water (Including sewage plant)
Limit value : 0,2 mg/l
Limit value type : PNEC (Sediment, freshwater) (ALANINE N,N-BIS(CARBOXYMETHYL), - TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)
Limit value : 24 mg/kg
Limit value type : PNEC soil, freshwater (ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)
Exposure route : Soil
Limit value : 2,5 mg/kg
Limit value type : PNEC (Sewage treatment plant) (ALANINE N,N-BIS(CARBOXYMETHYL), - TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)
Exposure route : Water (Including sewage plant)
Limit value : 100 mg/l

8.2 Exposure controls

Personal protection equipment

Eye/face protection



Wear suitable safety goggles in case of splash.

Suitable eye protection
EN 166.

Skin protection

Hand protection



Wear protective gloves in case of longer lasting skin contact.

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 quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

General health and safety measures

Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. P362+P364 - Take off contaminated clothing and wash it before reuse. P264 - Wash hands thoroughly after handling.

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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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid

Colour : colourless

Odour : characteristic

Safety relevant basis data

Initial boiling point and boiling range :	(1013 hPa)	approx.	100	°C
Flash point :			not determined	
Lower explosion limit :			not relevant	
Upper explosion limit :			not relevant	
Vapour pressure :	(50 °C)		not determined	
Density :	(20 °C)		1,01	g/cm ³
Solvent separation test :	(20 °C)		not relevant	
pH :			10,5	
Flow time :	(20 °C)		not determined	DIN-cup 4 mm
Maximum VOC content (EC) :			0	Wt %
Maximum VOC content (Switzerland) :			1,5	Wt %

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	> 2000 mg/kg

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Parameter : LD50 (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Exposure route : Oral
Species : Mouse
Effective dose : 5530 mg/kg
Method : OECD 401

Acute dermal toxicity

Parameter : ATEmix calculated
Exposure route : Dermal
Effective dose : > 2000 mg/kg
Parameter : LD50 (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Exposure route : Dermal
Species : Rabbit
Effective dose : 2764 mg/kg
Method : OECD 402

Acute inhalation toxicity

Parameter : ATEmix calculated
Exposure route : Inhalation
Effective dose : > 20 mg/l

Irritant and corrosive effects

Primary irritation to the skin

No further relevant information available.

Irritation to eyes

No further relevant information available.

Sensitisation

In case of skin contact

No further relevant information available.

In case of inhalation

No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No further relevant information available.

Germ cell mutagenicity

No further relevant information available.

Reproductive toxicity

No further relevant information available.

STOT-single exposure

No further relevant information available.

STOT-repeated exposure

No further relevant information available.

Aspiration hazard

No further relevant information available.

11.2 Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

11.3 Other adverse effects

Frequently or prolonged contact with skin may cause dermal irritation. Has degreasing effect on the skin.

11.4 Additional information

Preparation not tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1 Toxicity

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Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Species : Lepomis macrochirus (Bluegill)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : 1300 mg/l
Exposure time : 96 h
Method : OECD 203

Chronic (long-term) fish toxicity

Parameter : NOEC (ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)
Species : Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter : Chronic (long-term) fish toxicity
Effective dose : = 100 mg/l
Exposure time : 28 d
Method : OECD 204

Acute (short-term) daphnia toxicity

Parameter : EC50 (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : > 100 mg/l
Exposure time : 48 h
Method : OECD 202

Chronic (long-term) daphnia toxicity

Parameter : NOEC (ALANINE N,N-BIS(CARBOXYMETHYL), -TRINATRIUMSALT IN WATER ; CAS No. : 164462-16-2)
Species : Daphnia magna (Big water flea)
Evaluation parameter : Chronic (long-term) daphnia toxicity
Effective dose : >= 100 mg/l
Exposure time : 21 d
Method : Regulation (EC) No. 440/2008, Annex, C.20

Acute (short-term) algae toxicity

Parameter : EC50 (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Species : Scenedesmus subspicatus
Evaluation parameter : Acute (short-term) algae toxicity
Effective dose : > 100 mg/l
Exposure time : 48 h
Method : OECD 201

Bacteria toxicity

Parameter : EC10 (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Species : Bacteria toxicity
Effective dose : > 1995 mg/l
Exposure time : 30 min

12.2 Persistence and degradability

Biodegradation

Parameter : Biodegradation (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Inoculum : Biodegradation
Degradation rate : 90 - 100 %
Test duration : 14 d
Evaluation : Readily biodegradable (according to OECD criteria).
Method : OECD 301E
Parameter : Biodegradation (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Inoculum : Biodegradation
Degradation rate : 90 - 100 %
Test duration : 8 d

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Evaluation : Readily biodegradable (according to OECD criteria).
Method : OECD 302B

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

None

SECTION 13: Disposal considerations

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. List of proposed waste codes/waste designations in accordance with EWC

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

20 01 29* - detergents containing dangerous substances.

Waste code packaging

15 01 02 - plastic packaging.

Waste treatment options

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Handle contaminated packages in the same way as the substance itself.

13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14: Transport information

14.1 UN number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

14.6 Special precautions for user

None

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No transport as bulk according to IBC Code.

SECTION 15: Regulatory information

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

EU legislation

Other regulations (EU)

Labelling for contents according to regulation (EC) No. 648/2004

- < 5 % anionic surfactants
- < 5 % cationic surfactants
- < 5 % non-ionic surfactants

National regulations

AT: Labelling according to Austrian regulations (Chemikaliengesetz/ChemV).
CH: Chemikalienverordnung (ChemV) and Chemikalien-Risikoreduktions-Verordnung (Chem RRV) are complied.

Water hazard class (WGK)

Classification according to AwSV - Class : 2 (Significant hazardous to water)

15.2 Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

03. Hazardous ingredients - 15. Water hazard class (WGK)

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europäisches Übereinkommen über die Beförderung gefährlicher Güter auf der Straße)
AOX: adsorbierbare organisch gebundene Halogene
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
CAS: Chemical Abstracts Service (Unterabteilung der American Chemical Society)
CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen (Classification Labelling and Packaging)
EAK / AVV: europäischer Abfallartenkatalog / Abfallverzeichnis-Verordnung
ECHA: Europäische Chemikalienagentur (European Chemicals Agency)
EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances)
GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System of Classification and Labelling of Chemicals)
IATA: Internationale Luftverkehrs-Vereinigung (International Air Transport Association)
ICAO: Internationale Zivilluftfahrtorganisation (International Civil Aviation Organization)
IMDG: Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous Goods)
RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le transport international ferroviaire de marchandises dangereuses)
TRGS: Technische Regel für den Umgang mit Gefahrstoffen
VbF: Verordnung über brennbare Flüssigkeiten
VOC: flüchtige organische Verbindung (volatile organic compound)
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank
ECHA: Classification And Labelling Inventory
ECHA: Pre-registered Substances
ECHA: Registered Substances
EC_Safety Data Sheet of Suppliers
ESIS: European Chemical Substances Information System
GDL: Gefahrstoffdatenbank der Länder
UBA Rigoletto: Wassergefährdende Stoffe
Regulation (EC) No. 1907/2006 of the European Parliament and of the Council
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

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16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

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

H290 May be corrosive to metals.
H319 Causes serious eye irritation.

16.6 Training advice

None

16.7 Additional information

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.
