

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Version 01

LowCross-Buffer®

Revision Date 02.04.2025

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

1.1. Product identifier

Catalog number: CR100
Product name: LowCross-Buffer®

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

Identified uses: Laboratory chemicals
The product is intended for professional use.

1.3. Details of the Supplier of the Safety Data Sheet

Supplier: CANDOR Bioscience GmbH, part of Medix Biochemica
Simoniusstrasse 39
88239 Wangen
Germany
Telephone: +49 7522 795270
E-mail: medix@medixbiochemica.com

1.4 Emergency telephone number

+49 7522 795270 (only available during office hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.2: Label elements

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

Supplementary Hazard Information:

EUH208 Contains CMIT/MIT. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

2.3 Other hazards

This mixture does not contain components considered to:

- be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB), or
- have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture: Aqueous solution of organic / inorganic compounds. Hazardous ingredients: Ethanediol, CMIT/MIT				
CAS No./ EC No./ Registration No.	% [w/w]	Name	Classification according to Regulation (EC) No 1278/2008 (CLP).	SCL and/or M-factor
107-21-1/ 203-473-3/ 01-2119456816-28- XXXX	1 - 10%	Ethanediol	Acute Tox. 4, H302	
55965-84-9/ 911-418-6/ 01-2120764691-48- XXXX	< 0.0014 %	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (CMIT/MIT = 3/1).	Acute Tox. 2, H330; Acute Tox. 2; H310; Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071	Skin Corr. 1C; H314: C ≥ 0.6 %; Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 %; Eye Dam. 1; H318, C ≥ 0.6 %; Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 %; Skin Sens. 1A; H317: C ≥ 0.0015 %

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				M-factor=100
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Full text of H-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Following inhalation:

Remove casualty to fresh air and keep warm and at rest.

Following skin contact:

Wash immediately with soap and water. In case of skin irritation consult a physician.

Following 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.

Following ingestion:

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

Self-protection of the first aider:

First aider: Pay attention to self-protection!

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

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO₂), foam, water, extinguishing powder.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: None.

5.3 Advice for fire-fighters

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Use personal protective equipment, see Section 8.

For emergency responders:

Use personal protective equipment, see Section 8.

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 contaminated areas thoroughly.

6.4 Reference to other sections

For disposal refer to section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures: Use in well-ventilated areas. Handle and open container with care. Always close containers tightly after the removal of product. Wear personal protective clothing (see Section 8).

Measures to prevent fire: This product is not flammable. No special fire protection measures are necessary.

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Advice on general occupational hygiene: Avoid contact with skin, eyes and clothes. Provide eye shower and label its location conspicuously. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Wash contaminated clothing prior to re-use.

7.2 Conditions for safe storage, including any incompatibilities

No special measures are necessary.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Limit value type (country of origin)	Substance name	EC-No. CAS No.	Occupational exposure limit value		Monitoring and observation processes	Peak limitation	Source
			Long term	Short term			
IOELV (EU)	Ethanediol	203-473-3 107-21-1	52 mg/m ³ , 20 ppm; skin	104 mg/m ³ , 40 ppm; skin			2000/39 /EC
AGW (DE)	Ethanediol	203-473-3 107-21-1	26 mg/m ³ , 10 ml/m ³ 2(l);DF G, EU, H, Y, 11				TRGS 900

8.2 Exposure controls

Personal Protection

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Change contaminated clothing.

Eye/face protection: Safety glasses that comply with the appropriate standards, such as EN166.

Skin protection:

Full contact: Glove material: Nitrile rubber

Glove thickness: 0.11 mm

Break through time: > 480 min

Splash contact: Glove material: Nitrile rubber

Glove thickness: 0.11 mm

Break through time: > 480 min

The protective gloves to be used must comply with the specifications of Regulation (EU) 2016/425 and the related standard EN374.

This recommendation applies only to the product stated in this safety data sheet and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---|--|
| a) Physical state: | Liquid |
| b) Color: | Colorless to light yellow |
| c) Odor: | Odorless |
| d) Melting point / freezing point: | No data available |
| e) Initial boiling point and boiling range: | No data available |
| f) Flammability: | Not applicable, mixture is not flammable |

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g)	Upper/lower flammability or explosive limits:	Not applicable, mixture is neither flammable nor explosive
h)	Flash point:	No data available
i)	Autoignition temperature:	Not applicable, mixture is not ignitable
j)	Decomposition:	Not applicable
k)	pH:	7.2 ± 0.2
l)	Kinematic viscosity:	No data available
m)	Water solubility:	No data available
n)	Partition coefficient: n-octanol/water:	No data available
o)	Vapor pressure:	No data available
p)	Density:	1.02 g/cm ³
q)	Relative vapor pressure:	No data available
r)	Particle characteristics:	No data available

9.2 Other information

No additional information relevant to safe use of the mixture.

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

No specific conditions to avoid

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Mixture:

No data available

Acute toxicity: Ingredients:

Ethanediol		
Oral	LD50	> 4500 mg/kg (rat)
Dermal	LD50	> 3500 mg/kg (mouse)
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)		
Oral	LD50	53 mg/kg (rat)

Skin corrosion/irritation: Mixture

No data available

Skin corrosion/irritation: Ingredients

Ethanediol: No irritant effect		
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1): Skin - Rabbit, Result: Corrosive		

Serious eye damage/irritation: Mixture:

No data available

Serious eye damage/irritation: Ingredients:

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Ethanediol: Slight irritation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1): Eyes - Rabbit, Result: Corrosive to eyes
Respiratory or skin sensitisation: Mixture: No data available
Respiratory or skin sensitisation: Ingredients
Ethanediol: No sensitising effects known.
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1): SCL: Skin Corr. 1C; H314: C ≥ 0.6 %; Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 %; Eye Dam. 1, H318: C ≥ 0.6 %; Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 %; Skin Sens. 1A; H317: C ≥ 0.0015 %
Germ cell mutagenicity: No data available for the ingredients.
Carcinogenicity: No data available for the ingredients.
Reproductive toxicity: No data available for the ingredients.
Specific target organ toxicity (single exposure): No data available for the ingredients.
Specific target organ toxicity (repeated exposure): Mixture: No data available.
Specific target organ toxicity (repeated exposure): Ingredients: Ethanediol: Data available but do not justify classification
Aspiration hazard: No data available for the ingredients.
11.2 Additional Information
Endocrine disrupting properties: Mixture: This mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Ethanediol: No data available for this ingredient.		
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):		
Fish	LC50 (96 h)	0.19 mg/l
Crustaceans	LC50 (48 h) EC50 (48 h)	0.56 mg/l 0.18 mg/l
Algae	EC50 (72 h) EC50 (96 h)	0.13 mg/l 0.06 mg/l

12.2 Persistence and degradability

No data available for the ingredients.

12.3 Bioaccumulative potential

No data available for the ingredients.

12.4 Mobility in soil

No data available for the ingredients.

12.5 Results of PBT and vPvB assessment

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This mixture does not contain components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine

Endocrine disrupting properties:

This mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects:

No data available for the ingredients.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Product / Packaging disposal:

Handle uncleaned containers like the product itself.

SECTION 14: Transport information

14.1. UN number

(ADR, RID, ADN, IMDG, IATA)

Not applicable

14.2. UN proper shipping name

(ADR, RID, ADN, IMDG, IATA)

Not applicable

14.3. Transport hazard class(es)

(ADR, RID, ADN, IMDG, IATA)

Not applicable

14.4. Packing group

(ADR, RID, ADN, IMDG, IATA)

Not applicable

14.5. Environmental hazards

None

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO Instruments

Not applicable

SECTION 15: Regulatory Information

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

Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)

Mixture: Not listed

Ingredients: Not listed

Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)

Mixture: Not listed

Ingredients: Not listed

Regulation 850/2004/EC on persistent organic pollutants (POP)

Mixture: Not listed

Ingredients: Not listed

Restrictions according to Regulation 1907/2006/EC (REACH), Annex XVII

None

Substances subject to authorisation according to Regulation 1907/2006/EC (REACH),

Annex XIV / SVHC substances on the candidate list (above 0.1 % (w/w))

None

Self-classification carried out according to Appendix 1, AwSV

Mixture: Water Hazard Class 1

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Self-classification carried out according to TRGS510. German Regulation

Mixture: Storage Class 12

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

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. If the product is mixed with other substances or undergoes further processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

AGW: Arbeitsplatzgrenzwert (Occupational Exposure Limit Value, German regulation)

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS No: Chemical Abstracts Service number

CLP: Classification Labelling and Packaging Regulation

EC: European Commission

EC No: European Chemical number: EINECS, ELINCS or NLP

EEC: European Economic Community

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

EU: European Union

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IMDG: International Maritime Dangerous Goods

IOELV: Indicative Occupational Exposure Limit Value

LD50: Lethal dose, 50%

MARPOL: Marine Pollution

NLP: No-longer Polymers

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

SCL: Specific Concentration Limit

SVHC: Substance(s) of very high concern (according to Regulation 1907/2006/EC (REACH))

TRGS: Technische Regeln für Gefahrstoffe (Technical rules for dangerous goods, German regulation)

UN: United Nations

Full text of H-Statements referred to under section 3

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Irrit.	Eye irritation
Eye Dam.	Eye damage
H301	Toxic if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage.
H319	Causes serious eye irritation
H330	Fatal if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation

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Skin Sens.

Skin sensitisation