

# Safety Data Sheet

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



Trade name : BIO-CIRCLE L AERO  
Revision date : 13.12.2023  
Print date : 27.03.2024

Version : 1.0.0

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

### 1.1 Product identifier

BIO-CIRCLE L AERO

### 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

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

(Monday to Thursday from 8 am to 4 pm and Friday from 8 am to 3 pm)

## 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

(2-METHOXYMETHYLETHOXY)PROPANOL ; REACH No. : 01-2119450011-60-XXXX ; EC No. : 252-104-2; CAS No. : 34590-94-8

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

Classification 1272/2008 [CLP] : Substance with a common (EC) occupational exposure limit value.

ethpoxylated Alcohol

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

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

#### Additional information

For full text of Hazard- and EU Hazard-statements: 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. Never give anything by mouth to an unconscious person or a person with cramps.

### 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

Protect uninjured eye. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

### Following ingestion

Rinse mouth thoroughly with water. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. 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 (CO<sub>2</sub>) Sand Nitrogen Extinguishing blanket

#### Unsuitable extinguishing media

Full water jet

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

In case of fire may be liberated: Carbon monoxide , Carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

## 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-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8

Limit value type (country of origin) : TRGS 900 ( D )  
Limit value : 50 ppm / 310 mg/m<sup>3</sup>  
Peak limitation : 1(l)  
Version : 23.06.2022

Limit value type (country of origin) : TWA ( EC )  
Limit value : 50 ppm / 308 mg/m<sup>3</sup>  
Remark : Skin  
Version : 20.06.2019

#### DNEL-/PNEC-values

##### DNEL/DMEL

(2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8

Limit value type : DNEL Consumer (systemic)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 37,2 mg/m<sup>3</sup>

Limit value type : DNEL Consumer (systemic)

Exposure route : Dermal

Exposure frequency : Long-term

Limit value : 121 mg/kg bw/day

Limit value type : DNEL Consumer (systemic)

Exposure route : Oral

Exposure frequency : Long-term

Limit value : 36 mg/kg

Limit value type : DNEL worker (systemic)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 308 mg/m<sup>3</sup>

Limit value type : DNEL worker (systemic)

Exposure route : Dermal

Exposure frequency : Long-term

Limit value : 283 mg/kg bw/day

##### PNEC

(2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8

Limit value type : PNEC (Aquatic, freshwater)

Limit value : 19 mg/l

Limit value type : PNEC (Aquatic, marine water)

Limit value : 1,9 mg/l

Limit value type : PNEC (Sediment, freshwater)

Limit value : 70,2 mg/kg

Limit value type : PNEC (Sediment, marine water)

Limit value : 7,02 mg/kg

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Limit value type : PNEC (Soil)  
Limit value : 2,74 mg/kg dw  
Limit value type : PNEC (Sewage treatment plant)  
Limit value : 4,168 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



**Suitable gloves type** : EN 374.  
**Suitable material** : NBR (Nitrile rubber)  
**Breakthrough 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 information

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.

## 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

**Physical state** : Liquid

**Colour** : colourless

#### Odour

characteristic

#### Safety characteristics

<b>Melting point/freezing point</b> :	( 1013 hPa )	not determined
<b>Initial boiling point and boiling range</b> :	( 1013 hPa )	approx. 100 °C
<b>Flash point</b> :		none
<b>Auto-ignition temperature</b> :		none
<b>Flammability</b> :		non-flammable

DIN EN ISO 13736

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Vapour pressure :	( 50 °C )	not determined	
Density :	( 20 °C )	1	g/cm <sup>3</sup>
Water solubility :	( 20 °C )	completely miscible	
pH :	( 20 °C )	9	
Flow time :	( 20 °C )	not determined	DIN-cup 4 mm
Cinematic viscosity :	( 20 °C )	< 30	mm <sup>2</sup> /s
Relative vapour density :	( 20 °C )	not determined	
Maximum VOC content (EC) :		0	Weight-%
Maximum VOC content (Switzerland) :		0	Weight-%
Taxable VOC content (Switzerland) :		0	Weight-%

## 9.2 Other information

No further relevant information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

### 10.2 Chemical stability

The product 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 known hazardous decomposition products.  
Decomposition products in case of fire: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

##### Acute oral toxicity

Parameter :	LD50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg
Method :	OECD 401

##### Acute dermal toxicity

Parameter :	LD50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 19020 mg/kg
Method :	OECD 402

##### Acute inhalation toxicity

Parameter :	LC0 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 275 ppm
Exposure time :	7 h
Method :	OECD 403

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## Corrosion

### Skin corrosion/irritation

No further relevant information available.

### Serious eye damage/eye irritation

No further relevant information available.

## Respiratory or skin sensitisation

### Skin sensitisation

No further relevant information available.

### Sensitisation to the respiratory tract

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 Information on other hazards

### Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

### Toxicokinetics, metabolism and distribution

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

### Additional information

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

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

##### Acute (short-term) fish toxicity

Parameter : LC50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )  
Species : Poecilia reticulata (Guppy)  
Evaluation parameter : Acute (short-term) fish toxicity  
Effective dose : > 1000 mg/l  
Exposure time : 96 h  
Evaluation : Harmless to fish up to the concentration tested.  
Method : OECD 203

##### Acute (short-term) toxicity to crustacea

Parameter : EC50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )  
Species : Daphnia magna (Big water flea)  
Evaluation parameter : Acute (short-term) daphnia toxicity  
Effective dose : 1919 mg/l  
Exposure time : 48 h  
Evaluation : Harmless to daphnia up to the tested concentration.

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Method : OECD 202

### Acute (short-term) toxicity to algae and cyanobacteria

Parameter : EC50 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )  
Species : Pseudokirchneriella subcapitata  
Evaluation parameter : Inhibition of growth rate  
Effective dose : > 969 mg/l  
Exposure time : 72 h  
Evaluation : Harmless to algae up to the concentration tested.  
Method : OECD 201

### Chronic (long-term) toxicity to aquatic algae and cyanobacteria

Parameter : NOEC ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )  
Species : Pseudokirchneriella subcapitata  
Evaluation parameter : Inhibition of growth rate  
Effective dose : 969 mg/l  
Exposure time : 72 h  
Evaluation : Harmless to algae up to the concentration tested.  
Method : OECD 201

### Toxicity to microorganisms

Parameter : EC10 ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )  
Species : Pseudomonas putida  
Evaluation parameter : Bacteria toxicity  
Effective dose : 4168 mg/l  
Exposure time : 18 h

## 12.2 Persistence and degradability

### Biodegradation

Parameter : DOC reduction ( (2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8 )  
Inoculum : Biodegradation  
Evaluation parameter : Aerobic  
Degradation rate : 96 %  
Test duration : 28 D  
Evaluation : Readily biodegradable (according to OECD criteria).  
Method : OECD 301F

## 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 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

## 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Directive 2008/98/EC (Waste Framework Directive)

##### Before intended use

##### Waste codes/waste designations according to EWC/AVV

07 06 01\* (Aqueous washing liquids and mother liquors)  
20 01 29\* (Detergents containing hazardous substances)

##### Other disposal recommendations

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Dispose of waste according to applicable legislation. Dispose of contents/container to an appropriate recycling or disposal facility. 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

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## 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 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

## SECTION 15: Regulatory information

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

#### EU legislation

##### Authorisations and/or restrictions on use

##### Restrictions on use

Use restriction according to REACH annex XVII, no. : 40, 75

##### Other regulations (EU)

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

< 5 % amphoteric surfactants

##### National regulations

##### Technische Anleitung zur Reinhaltung der Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

##### Water hazard class

Classification according to AwSV - Class : 1 (Slightly 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

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 03. Hazardous ingredients

### 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



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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)  
VVEA: Verordnung über die Vermeidung und die Entsorgung von Abfällen  
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  
|-> COMMISSION REGULATION (EU) 2020/878 of 18 June 2020  
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

### 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)

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.