

Trade name : BIO-CIRCLE L  
Revision date : 04.12.2014  
Print date : 20.07.2015

Version (Revision) : 4.0.1 (4.0.0)

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

### 1.1 Product identifier

BIO-CIRCLE L

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

#### Relevant identified uses

Washing and cleaning products (including solvent based 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.

#### Additional information

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

### 2.3 Other hazards

None

## SECTION 3: Composition / information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

ALCOHOLS, C-12-C14, ETHOXYLATED, PROPOXYLATED ; EC No. : 931-986-9; CAS No. : 68439-51-0

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

Classification 1272/2008 [CLP] : Aquatic Chronic 3 ; H412

#### Further ingredients

The preparation contains micro-organisms.

The used micro-organisms are a „mixed-culture“ of risk 1 organisms (evaluation in accordance with BG Chemie, risk 1 = no risk for human beings and vertebrates, current state of art).

#### Additional information

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

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

#### Following inhalation

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In case of respiratory tract irritation, consult a physician. 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**

None

**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

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

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

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

**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. 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**

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**

Wash hands before breaks and after work. Apply skin care products after work. Keep container tightly closed.

**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**

None

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## 8.2 Exposure controls

### Personal protection 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.

**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

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. 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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance** : liquid

**Colour** : colourless

**Odour** : apple

#### Safety relevant basis data

<b>Solidifying point</b> :	( 1013 hPa )	ca.	0	°C
<b>Initial boiling point and boiling range</b> :	( 1013 hPa )	ca.	98	°C
<b>Flash point</b> :				not relevant
<b>Ignition temperature</b> :				not relevant
<b>Lower explosion limit</b> :				not relevant
<b>Upper explosion limit</b> :				not relevant
<b>Density</b> :	( 20 °C )	ca.	0,99	g/cm <sup>3</sup>
<b>pH</b> :		ca.	8,5	
<b>Maximum VOC content (EC)</b> :			0	Wt %
<b>Maximum VOC content (Switzerland)</b> :			0,9	Wt %

### 9.2 Other information

CH : This product is not under the liability for taxation of VOC acc. VOCV (< 3 % VOC).

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

No information available.

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### 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.

## 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
Parameter :	LD50 ( ALCOHOLS, C-12-C14, ETHOXYLATED, PROPOXYLATED ; CAS No. : 68439-51-0 )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 2000 mg/kg

##### Acute dermal toxicity

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

##### Acute inhalation toxicity

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

#### Irritant and corrosive effects

slightly irritant but not relevant for classification.

### 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

#### Aquatic toxicity

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

Parameter :	EC50 ( ALCOHOLS, C-12-C14, ETHOXYLATED, PROPOXYLATED ; CAS No. : 68439-51-0 )
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 1 - 10 mg/l
Exposure time :	48 h
Method :	OECD 202
Parameter :	EC50 ( ALCOHOLS, C-12-C14, ETHOXYLATED, PROPOXYLATED ; CAS No. : 68439-51-0 )
Species :	Desmodesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 1 - 10 mg/l
Exposure time :	72 h

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Method : OECD 201

## 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.

### Biodegradation

Parameter :	Biodegradation ( ALCOHOLS, C-12-C14, ETHOXYLATED, PROPOXYLATED ; CAS No. : 68439-51-0 )
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Effective dose :	> 60 %
Exposure time :	28 d
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C
Parameter :	Biodegradation ( ALCOHOLS, C-12-C14, ETHOXYLATED, PROPOXYLATED ; CAS No. : 68439-51-0 )
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Effective dose :	> 70 %
Exposure time :	28 d
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A

## 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

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

## 12.6 Other adverse effects

No information available.

## 12.7 Additional ecotoxicological information

None

## SECTION 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 those mentioned in 20 01 29.

###### Waste code packaging

15 01 02 - plastic packaging.

##### 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.

### 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 goods in sense of this transport regulation.

### 14.2 UN proper shipping name

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- No dangerous goods in sense of this transport regulation.
- 14.3 Transport hazard class(es)**  
No dangerous goods in sense of this transport regulation.
- 14.4 Packing group**  
No dangerous goods in sense of this transport regulation.
- 14.5 Environmental hazards**  
No dangerous goods in sense of this transport regulation.
- 14.6 Special precautions for user**  
None

## SECTION 15: Regulatory information

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

#### EU legislation

##### Other regulations (EU)

##### Restrictions of occupation

None

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

< 5 % non-ionic surfactants  
perfumes

#### 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)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

#### Other regulations, restrictions and prohibition regulations

##### Betriebssicherheitsverordnung (BetrSichV)

No flammable liquid according to BetrSichV.

### 15.2 Chemical Safety Assessment

No information available.

## SECTION 16: Other information

### 16.1 Indication of changes

03. Hazardous ingredients

### 16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOX: adsorbable organohalogenes

CAS: Chemical Abstracts Service (division of the American Chemical Society)

CLP: Classification Labelling and Packaging (Regulation (EC) No. 1272/2008)

EAK / AVV: europäischer Abfallschlüsselkatalog (european waste catalogue)

EINECS: European Inventory of Existing Commercial Chemical Substances

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Code for Dangerous Goods

RCP: reciprocal calculation procedure

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

TRGS: Technische Regel für den Umgang mit Gefahrstoffen

VbF: Verordnung über brennbare Flüssigkeiten

VOC: volatile organic compound

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse (water hazardous class)

### 16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank

ECHA: Classification And Labelling Inventory

ECHA: Registered Substances

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ECHA: Registered Substances  
EC: Safety Data Sheet of Suppliers  
ESIS: European Chemical Substances Information System  
GDL: Gefahrstoffdatenbank der Länder  
UBA Rigoletto: Wassergefährdende Stoffe

**16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]**

No information available.

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

None

**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.

