

Safety data sheet

according to 1907/2006/EC, Article 31

Date of issue: 15.03.2011

Revision: 15.03.2011

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

- **Product identifier**
- **Trade name:** Korsolex® plus
- **SAP-Code:** EN R10082
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Disinfectants for instruments
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
BODE Chemie GmbH
Melanchthonstraße 27
D-22525 Hamburg (Germany)
Tel.: +49 (0)40 / 54 00 60
- **Informing department:**
KundenService-SiDa@bode-chemie.de
- **Emergency telephone number:**
Giftnotruf Göttingen (Germany)
24h-Tel.: +49 (0)551 / 1 92 40

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 -  C; Corrosive
R34: Causes burns.
 -  Xn; Harmful
R22: Harmful if swallowed.
 -  N; Dangerous for the environment
R50: Very toxic to aquatic organisms.
 - R10: Flammable.
- **Classification system:**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- **Label elements**
- **Labelling according to EU guidelines:**
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV).
- **Code letter and hazard designation of product:**
 -   C Corrosive
N Dangerous for the environment
- **Hazard-determining components of labelling:**
didecyldimethylammoniumchloride
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
- **Risk phrases:**
10 Flammable.
22 Harmful if swallowed.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Date of issue: 15.03.2011

Revision: 15.03.2011

Trade name: Korsolex® plus

(Contd. of page 1)

34 Causes burns.

50 Very toxic to aquatic organisms.

· Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures**· Description:** Mixture of the substances listed below with harmless additions.**· Dangerous components:**

CAS: 7173-51-5 EINECS: 230-525-2	didecyldimethylammoniumchloride C R34; Xn R22; N R50 Skin Corr. 1B, H314; Acute Tox. 4, H302	10-25%
CAS: 2372-82-9 EINECS: 219-145-8	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine C R35; Xn R22; N R50 Acute Tox. 3, H301; STOT RE 2, H373; Skin Corr. 1A, H314; Aquatic Acute 1, H400	5-10%
CAS: 67-63-0 EINECS: 200-661-7	isopropanol Xi R36; F R11 R67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	5-10%
CAS: 107-21-1 EINECS: 203-473-3	ethane-1,2-diol Xn R22 Acute Tox. 4, H302	5-10%
CAS: 68439-50-9	fatty alcohol polyglycole ether Xn R22; Xi R41 Eye Dam. 1, H318; Acute Tox. 4, H302	1-5%
	nonionic surfactant Xn R22; Xi R41 Eye Dam. 1, H318; Acute Tox. 4, H302	1-5%
CAS: 95465-87-5 EINECS: 306-002-0	Fettalkyldiammoniumpolyglykoether Xi R36/38 Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-5%

· Regulation (EC) No 648/2004 on detergents / Labelling for contents

non-ionic surfactants	5 - 15%
disinfectants, perfumes ((R)-p-mentha-1,8-diene, CITRONELLOL)	

· Additional information

For the wording of the listed risk phrases refer to section 16.

CAS: 2372-82-9: carbonic acid salt

EUE

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Date of issue: 15.03.2011

Revision: 15.03.2011

Trade name: **Korsolex® plus**

(Contd. of page 2)

4 First aid measures

- **Description of first aid measures**
- **General information** Get medical advice/attention.
- **After inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- **After skin contact**
Remove/Take off immediately all contaminated clothing.
Wash with plenty of soap and water.
- **After eye contact** Rinse cautiously with water for several minutes.
- **After swallowing**
Rinse mouth.
Do NOT induce vomiting.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store only in the original container.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 4)

EUE

Safety data sheet
according to 1907/2006/EC, Article 31

Date of issue: 15.03.2011

Revision: 15.03.2011

Trade name: **Korsolex® plus**

(Contd. of page 3)

· **Control parameters**· **Components with critical values that require monitoring at the workplace:****107-21-1 ethane-1,2-diol**

IOELV (European Union)	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin
------------------------	--

64-19-7 acetic acid, of a concentration of more than

IOELV (European Union)	25 mg/m ³ , 10 ppm
------------------------	-------------------------------

· **Additional information:** The lists that were valid during the compilation were used as basis.· **Exposure controls**· **Personal protective equipment**· **General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Not required.· **Protection of hands:**

Impervious gloves.

Only use chemical-protective gloves with CE-labelling of category 3.

Check protective gloves prior to each use for their proper condition.

After use of gloves apply skin-cleaning agents and skin cosmetics.

· **Material of gloves**

1. Nitrile rubber, NBR

2. Butyl rubber, BR

Recommended thickness of the material: 1. 0,4 mm / 2. 0,7 mm

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **As protection from splashes gloves made of the following materials are suitable:**

1. Nitrile rubber, NBR

2. Butyl rubber, BR

· **Not suitable are gloves made of the following materials:** PVA gloves· **Eye protection:** Tightly sealed safety glasses.· **Body protection:** Protective work clothing.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	fluid
Colour:	green-blue
Smell:	pleasant

· **pH-value at 20°C:** 9,5· **Change in condition****Melting point/Melting range:** not determined**Boiling point/Boiling range:** not determined

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Date of issue: 15.03.2011

Revision: 15.03.2011

Trade name: **Korsolex® plus**

(Contd. of page 4)

· Flash point:	44°C
· Self-inflammability:	product is not selfigniting
· Danger of explosion:	product is not explosive
· Density at 20°C	1,01 g/cm ³
· Solubility in / Miscibility with Water:	fully miscible

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

7173-51-5 didecyldimethylammoniumchloride

Oral	LD50	645 mg/kg (rat)
------	------	-----------------

2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

Oral	LD50	261 mg/kg (rat)
------	------	-----------------

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Harmful

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability**
- **Other information:**
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

(Contd. on page 6)

EUE

Safety data sheet

according to 1907/2006/EC, Article 31

Date of issue: 15.03.2011

Revision: 15.03.2011

Trade name: **Korsolex® plus**

(Contd. of page 5)

- **Ecotoxicological effects:**
- **Behaviour in sewage processing plants:**

Type of test	Effective concentration Method Assessment
---------------------	--

EC50	175 mg/l (Belebtschlamm / activated sludge) (OECD 209)
------	--

- **Additional ecological information:** -
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated under adherence to official regulations.

European waste catalogue	
---------------------------------	--

07 06 01*	aqueous washing liquids and mother liquors
-----------	--

16 03 05*	organic wastes containing dangerous substances
-----------	--

18 01 06*	chemicals consisting of or containing dangerous substances
-----------	--

- **Uncleaned packagings:**
- **Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



- **ADR/RID-GGVS/E Class:** 3 (FC) Flammable liquids.
- **Kemler Number:** 38
- **UN-Number:** 2924
- **Packaging group:** III
- **Label:** 3+8
- **Special marking:** Symbol (fish and tree)
- **UN proper shipping name:** 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (isopropanol, didecyldimethylammoniumchloride)

- **Maritime transport IMDG/GGVSea:**



- **IMDG/GGVSea Class:** 3
- **UN Number:** 2924
- **Label:** 3+8
- **Packaging group:** III
- **EMS Number:** F-E,S-C

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Date of issue: 15.03.2011

Revision: 15.03.2011

Trade name: Korsolex® plus

(Contd. of page 6)

- **Marine pollutant:** Yes
Symbol (fish and tree)
- **Correct technical name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (isopropanol, didecyldimethylammoniumchloride)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 2924
- **Label:** 3+8
- **Packaging group:** III
- **Correct technical name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (isopropanol, didecyldimethylammoniumchloride)

- **Special precautions for user** Warning: Flammable liquids.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Decree to be applied in case of technical fault:**
Critical quantity values according to the regulations on accidents should be adhered to.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H225 Highly flammable liquid and vapour.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.

- R11 Highly flammable.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R35 Causes severe burns.
- R36 Irritating to eyes.
- R36/38 Irritating to eyes and skin.
- R41 Risk of serious damage to eyes.
- R50 Very toxic to aquatic organisms.
- R67 Vapours may cause drowsiness and dizziness.

- *** Data compared to the previous version altered.**