

## 1. Identification of substance :

### Product details :

Trade Name : Linotox<sup>®</sup>

SAP - Code : EN R10166

Application of the substance / the preparation Surface disinfectant

### 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 Information :

Giftnotruf Göttingen (Germany)

24h-Tel. : + 49 (0)551 / 1 92 40

## 2. Hazards identification :

### Hazard designation :



*Xi Irritant*

*N Dangerous for the environment*

### Information pertaining to particular danger for man and environment

R 10 Flammable.

R38 Irritating to skin.

R 41 Risk of serious damage to eyes.

R 50 Very toxic to aquatic organisms.

### 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.

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### 3. Composition / Information on ingredients

**Chemical characterization**

**Description :** Mixture of the substance listed below with harmless additions.

**Dangerous components:**

CAS: 7173-51-5 EINECS : 230-525-2	didecyldimethylammoniumchloride	 C  Xn  N; R 22- 34- 50	5-10%
CAS: 67-63-0 EINECS: 200-661-7	isopropanol	 Xi,  F; R 11-36-67	5-10%
CAS: 68439-50-9	fatty alcohol polyglycole ether	 Xn,  Xi; R 22-41	1-5%
CAS: 64-02-8 EINECS: 200-573-9	tetrasodium ethylenediaminetetraacetate	 Xn,  Xi; R 22-41	1-5%

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

non-ionic surfactants, EDTA and salts thereof	< 5%
disinfectants	

### 4. 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** 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.

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**Additional information** For the wording of the listed risk phrases refer to section 16 (Contd.of page 2)

## 5. Fire fighting measures

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Protective equipment:** No special measures required.

## 6. Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**  
Prevent material from reaching sewage system, holes and cellars.  
Dilute with much water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

## 7. Handling and storage

- **Handling**
- **Information for safe handling:** Keep containers tightly sealed.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Storage**
- **Requirements to be met by storerooms and containers:** Store only in the original container.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep container tightly sealed.

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## **8. Exposure controls and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**  
*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** *The lists that were valid during the compilation were used as basis.*
- **Personal protective equipment**
- **General protective and hygienic measures**  
*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 trough 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.*

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**9. Physical and chemical properties:**

<b>- General Information</b>	
<b>Form:</b>	<i>fluid</i>
<b>Colour:</b>	<i>colourless</i>
<b>Smell:</b>	<i>Weak, characteristic</i>
<b>- Change in condition</b>	
<b>Melting point/Melting range:</b>	<i>not determined</i>
<b>Boiling Point/Boiling range :</b>	<i>not determined</i>
<b>- Flash Point:</b>	<i>37°C</i>
<b>- Self-inflammability:</b>	<i>product is not selfigniting</i>
<b>- Danger of explosion:</b>	<i>product is not explosive. However, formation of explosive air/steam mixtures is possible</i>
<b>- Density at 20°C</b>	<i>1 g/cm<sup>3</sup></i>
<b>- Solubility in / Miscibility with Water:</b>	<i>fully miscible</i>
<b>- pH-value (Konz. g/l) at 20°C:</b>	<i>12-13</i>
<b>- Viscosity:</b>	
<b>dynamic at 20°C:</b>	<i>5 mPas</i>

**10. Stability and reactivity:**

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.*
- Materials to be avoided:*
- Dangerous reactions No dangerous reactions known.*
- Dangerous products of decomposition: No dangerous decomposition products known.*

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**11. Toxicological information****Acute toxicity :****LD/LC50 values that are relevant for classification:**

Oral	LD50	4650kg (Ratte / rat)
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*on the skin:* Irritant for skin and mucous membranes.*on the eye:* Strong irritant with the danger of severe eye injury.*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:

Irritant

**12. Ecological information****Information about elimination (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.

**Ecotoxicological effects:****Acquatic toxicity:**

LC50	6,8 mg/l ( <i>Leuciscus idus</i> ) (OECD 203)
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**Additional ecological information :**

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**13. Disposal considerations :**

**Product:**

**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.*

<b>European waste catalogue</b>	
07 06 01*	<i>aqueous washing liquids and mother liquors</i>
16 03 05*	<i>organic wastes containing dangerous substances</i>
18 01 06*	<i>chemicals consisting of or containing dangerous substances</i>

**Uncleaned packagings:**

**Recommendation:** *Dispose of packaging according to regulations on the disposal of packagings.*

**Recommended cleaning agent:** *Water, if necessary with cleaning agent.*

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## 14. Transport information :

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



- ADR / RID – GGVS/E Class : 3 (Fl) Flammable Liquids.
- Kehler Number: 30
- UN- Number: 1993
- Packaging group: III
- Label : 3
- Special marking : Symbol (fish and tree)
- Designation of goods : **1993 FLAMMABLE LIQUID, N.O.S.** (isopropanol, didecyldimethylammoniumchloride).

- Maritime transport IMDG/GGVSea :



- IMDG/GGVSea Class: 3
- UN Number: 1993
- Label: 3
- Packaging group: III
- EMS Number: F-E,S-C
- Marine pollutant: Yes
- Symbol (fish and tree)

**Correct technical name:** **FLAMMABLE LIQUID, N.O.S.** (isopropanol, didecyldimethylammoniumchloride)

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



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1993
- **Label:** 3
- **Packaging group:** III
- **Correct technical name:** **FLAMMABLE LIQUID, N.O.S. (isopropanol, didecyldimethylammoniumchloride)**

## 15. Regulatory information

- **Designation according to EC guidelines :**

*The product has been classified and labeled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV).*

- **Code letter and hazard designation of product :**



**Hazard-determining components of labeling:**  
*glutaral*

- **Risk phrases :**

- 10 *Flammable*
- 38 *Irritating to skin.*
- 41 *Risk of serious damage to eyes.*
- 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.*
- 37/39 *Wear suitable protective clothing, gloves and eye / face protection.*
- 61 *Avoid release to the environment. Refer to special instructions/safety data sheets.*

- **Decree to be applied in case of technical fault:**

*Critical quantity values according to the regulations on accidents should be adhered to.*

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### **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 R-phrases**

- 11 *Highly flammable.*
- 22 *Harmful if swallowed.*
- 34 *Causes burns.*
- 36 *Irritating to eyes.*
- 41 *Risk of serious damage to eyes.*
- 50 *Very toxic to aquatic organisms*
- 67 *Vapours may cause drowsiness and dizziness.*

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