

Safety data sheet

according to 1907/2006/EC, Article 31







Date of issue: 16.12.2011

Revision: 16.12.2011

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

- **1.1 Product identifier**
- **Trade name:** Kohrsolin® FF
- **SAP-Code:** EN R10494
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Surface disinfectant
- **1.3 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
- **1.4 Emergency telephone number:**
Giftnotruf Göttingen (Germany)
24h-Tel.: +49 (0)551 / 1 92 40

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  *Xn; Harmful*
 R20/22: Harmful by inhalation and if swallowed.
-  *Xn; Sensitising*
 R42/43: May cause sensitisation by inhalation and skin contact.
-  *Xi; Irritant*
 R37/38-41: Irritating to respiratory system and skin. Risk of serious damage to eyes.
-  *N; Dangerous for the environment*
 R50: 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.
- **2.2 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:**
- 

 Xn Harmful
 N Dangerous for the environment
- **Hazard-determining components of labelling:**
glutaral
- **Risk phrases:**
20/22 Harmful by inhalation and if swallowed.

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- 37/38 Irritating to respiratory system and skin.
 41 Risk of serious damage to eyes.
 42/43 May cause sensitisation by inhalation and skin contact.
 50 Very toxic to aquatic organisms.

Safety phrases:

- 23 Do not breathe fumes/aerosol.
 24 Avoid contact with skin.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 37/39 Wear suitable 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.

2.3 Other hazards**Results of PBT and vPvB assessment**

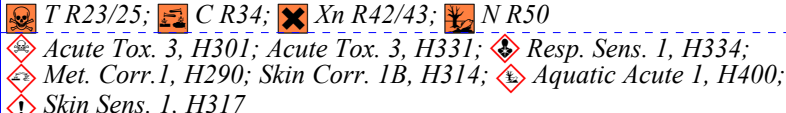
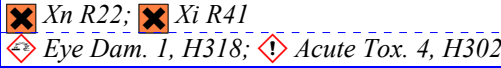
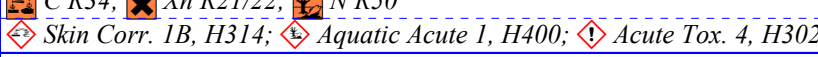
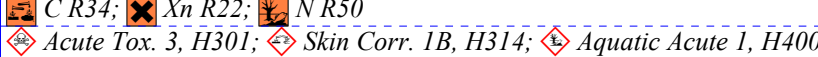

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

3.2 Chemical characterization: Mixtures

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

Dangerous components:

CAS: 111-30-8 EINECS: 203-856-5	glutaral  T R23/25; C R34; Xn R42/43; N R50 Acute Tox. 3, H301; Acute Tox. 3, H331; Resp. Sens. 1, H334; Met. Corr. 1, H290; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Skin Sens. 1, H317	5-10%
	nonionic surfactant  Xn R22; Xi R41 Eye Dam. 1, H318; Acute Tox. 4, H302	1-5%
CAS: 68391-01-5 EINECS: 269-919-4	Benzyl-C12-18-alkyldimethylammoniumchlorides  C R34; Xn R21/22; N R50 Skin Corr. 1B, H314; Aquatic Acute 1, H400; Acute Tox. 4, H302	1-5%
CAS: 7173-51-5 EINECS: 230-525-2	didecyldimethylammoniumchloride  C R34; Xn R22; N R50 Acute Tox. 3, H301; Skin Corr. 1B, H314; Aquatic Acute 1, H400	1-5%
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	1-5%

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

non-ionic surfactants	5 - 15%
disinfectants, CITRONELLOL, Limonen	

- **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

- **General information** Medical supervision for at least 48 hours.
- **After inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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- **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.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Put on breathing apparatus.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use breathing protection against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.

7 Handling and storage

- **7.1 Precautions for safe handling**
Keep containers tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Protect from frost.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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- **8.1 Control parameters**
- **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.
- **8.2 Exposure controls**
- **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 necessary if room is well-ventilated.
- **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:**
Natural rubber, NR
PVA gloves
- **Eye protection:** Tightly sealed safety glasses.

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	fluid
Colour:	yellowish
Smell:	Characteristic
- **pH-value (Konz. g/l) at 20°C:** 3
- **Change in condition**

Melting point/Melting range:	not determined
Boiling point/Boiling range:	not determined
- **Flash point:** 71°C
- **Self-inflammability:** product is not selfigniting
- **Danger of explosion:** product is not explosive
- **Density at 20°C** 1,01 g/cm³

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· Solubility in / Miscibility with

- Water:** soluble
- 9.2 Other information** No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information**· 11.1 Information on toxicological effects****· Acute toxicity:****· LD/LC50 values that are relevant for classification:**

Oral	LD50	3000 mg/kg (Rat)
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· Primary irritant effect:

- **on the skin:** Irritant for skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.

· Sensitization:

Sensitization possible by inhalation.

Sensitization possible by skin contact.

· 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:

Harmful

Irritant

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:**
The product is biodegradable.
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.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:** -
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations



- **13.1 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

- **14.1 UN-Number**
· **ADR, IMDG, IATA** UN3082
- **14.2 UN proper shipping name**
· **ADR** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral, benzododecinium chloride)
· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral, benzododecinium chloride), MARINE POLLUTANT
· **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral, benzododecinium chloride)
- **14.3 Transport hazard class(es)**
· **ADR**

 - **Class** 9 (M6) Miscellaneous dangerous substances and articles.
 - **Label** 9
- **IMDG, IATA**

 - **Class** 9 Miscellaneous dangerous substances and articles.
 - **Label** 9
- **14.4 Packing group**
· **ADR, IMDG, IATA** III

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· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: benzododecinium chloride, glutaral
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Kemler Number:	90
· EMS Number:	F-A,S-F
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Information about limitation of use:**
Employment restrictions concerning pregnant and lactating women must be observed.
- **Decree to be applied in case of technical fault:**
Critical quantity values according to the regulations on accidents should be adhered to.
- **15.2 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.
H290 May be corrosive to metals.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
- R11 Highly flammable.
R21/22 Harmful in contact with skin and if swallowed.
R22 Harmful if swallowed.
R23/25 Toxic by inhalation and if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R41 Risk of serious damage to eyes.
R42/43 May cause sensitisation by inhalation and skin contact.
R50 Very toxic to aquatic organisms.
R67 Vapours may cause drowsiness and dizziness.

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