



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 1 of 9

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

##### 1.1. Product identifier

Name: Bohricin

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

###### Use of the substance/mixture

Disinfectant

##### 1.3. Details of the supplier of the safety data sheet

Company name: FAVODENT Karl Huber GmbH

Street: Greschbachstr. 7

Place: D-76229 Karlsruhe

Telephone: +49 (0) 721 626 86-0

Telefax: +49 (0) 721 626 86-66

e-mail: info@favodent.com

Contact person: Apoth. Wolf

Telephone: +49 (0) 721 626 86-0

e-mail: info@favodent.com

Internet: www.favodent.com

Responsible Department: Zentrale

##### 1.4. Emergency telephone number:

+49 (0) 721 626 86-0

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

Indications of danger: C - Corrosive

R phrases:

Flammable.

Causes burns.

May cause sensitisation by skin contact.

###### GHS classification

Hazard categories:

Flammable liquid: Flam. Liq. 3

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory/skin sensitization: Skin Sens. 1

Hazard Statements:

Flammable liquid and vapour.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

##### 2.2. Label elements

###### Hazardous components which must be listed on the label

caustic potash, potassium hydroxide

Formaldehyde ... %

Signal word: Danger

Pictograms: GHS02-GHS05-GHS07



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 2 of 9



#### Hazard statements

- H226 Flammable liquid and vapour.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

#### Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P501 Dispose of waste according to applicable legislation.

#### 2.3. Other hazards

PBT: not applicable. vPvB: not applicable

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	
67-63-0	F - Highly flammable, Xi - Irritant R11-36-67	2,5-10 %
603-117-00-0	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	
215-181-3	caustic potash, potassium hydroxide	
1310-58-3	C - Corrosive, Xn - Harmful R22-35	2,5-10 %
019-002-00-8	Acute Tox. 4, Skin Corr. 1A; H302 H314	
203-474-9	Ethandial ... %; glyoxal	
107-22-2	Muta. Cat. 3, Xn - Harmful, Xi - Irritant R68-20-36/38-43	<1 %
605-016-00-7	Muta. 2, Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H341 H332 H319 H315 H317	
200-001-8	Formaldehyde ... %	
50-00-0	Carc. Cat. 3, T - Toxic, C - Corrosive R40-23/24/25-34-43	<1 %
605-001-00-5	Carc. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H351 H331 H311 H301 H314 H317	

Full text of R and H phrases: see Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Change contaminated, saturated clothing. In case of accident or unwellness, seek medical advice



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 3 of 9

immediately (show directions for use or safety data sheet if possible).

#### After inhalation

In case of inhalation of product / fumes, affected person should be moved into fresh air and kept still.  
Call a physician immediately.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap.  
Seek medical advice immediately.

#### After contact with eyes

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

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.  
Do NOT induce vomiting.

#### **4.2. Most important symptoms and effects, both acute and delayed**

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

First Aid, decontamination, treatment of symptoms.

### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>). alcohol resistant foam. Water spray jet

##### **Unsuitable extinguishing media**

Full water jet

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

No further information available.

#### **5.3. Advice for firefighters**

Special protective equipment for firefighters: Protective clothing. In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Residues of fire and contaminated water have to be disposed according to the local regulations.

### SECTION 6: Accidental release measures

#### **6.1. Personal precautions, protective equipment and emergency procedures**

See protective measures under point 7 and 8. Provide adequate ventilation. Personal protection equipment: see section 8 Keep away from unprotected people. Do not touch or tread spilled product.

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Cover drains. Spilled product must not leak into the ground. Release of big amounts may be harmful to the environment. In case of entry into waterways, soil or drains, inform the responsible authorities.

#### **6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Use only noncombustible absorbents. Treat the recovered material as prescribed in the section on waste disposal.

#### **6.4. Reference to other sections**

See protective measures under point 7 and 8.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 4 of 9

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

See chapter 8. Wear personal protection equipment (see chapter 8). Keep container tightly closed.

#### Advice on protection against fire and explosion

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

#### Further information on handling

Empty containers may contain hazardous residues of the product.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

#### Advice on storage compatibility

Keep away from:

Food and feedingstuffs  
oxidizing agents

#### Further information on storage conditions

Keep away from:

Frost  
Heat  
Moisture

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
50-00-0	Formaldehyde	2	2.5		TWA (8 h)	WEL
		2	2.5		STEL (15 min)	WEL
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
1310-58-3	Potassium hydroxide	-	-		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

### 8.2. Exposure controls

#### Appropriate engineering controls

Not necessary

#### Protective and hygiene measures

Only wear fitting, comfortable and clean protective clothing.

Avoid contact with skin, eyes and clothes.

Wash hands and face before breaks and after work and take a shower if necessary.

#### Eye/face protection

Suitable eye protection:



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 5 of 9

Tightly sealed goggles.

#### Hand protection

Suitable gloves type:  
NBR (Nitrile rubber) DIN EN 374,  
Butyl caoutchouc (butyl rubber) DIN EN 374  
NR (natural rubber, natural latex)

#### Skin protection

Protective clothing.

#### Respiratory protection

Not necessary

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: liquid  
Colour: light yellow

#### Test method

pH-Value (at 20 °C): > 13,5

#### Changes in the physical state

Initial boiling point and boiling range: 78 °C

Flash point: 36 °C

#### Explosive properties

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits: Not determined.

Upper explosion limits: Not determined.

Vapour pressure:  
(at 20 °C) 23 hPa

Density (at 20 °C): 1,03 g/cm<sup>3</sup>

Partition coefficient: Not determined.

Viscosity / dynamic: Not determined.

Viscosity / kinematic: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solvent content: Organic solvents: 23,3 %  
Water: 72,0 %

### 9.2. Other information

Solid content: 4,8%

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

### 10.2. Chemical stability

No dangerous reactions by handling and stock-keeping according to the guidelines.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 6 of 9

#### **10.4. Conditions to avoid**

No further Information available.

#### **10.5. Incompatible materials**

No further Information available.

#### **10.6. Hazardous decomposition products**

No known hazardous decomposition products.

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

CAS No	Chemical name					
	Exposure routes	Method	Dose	Species	Source	
1310-58-3	caustic potash, potassium hydroxide					
	oral	LD50	273 mg/kg	Rat	RTECS	
107-22-2	Ethandial ... %; glyoxal					
	dermal	LD50 mg/kg	12700	Rabbit	GESTIS	
	inhalative (4 h) vapour	LC50	2,41 mg/l	Rat	GESTIS	
	inhalative aerosol	ATE	1,5 mg/l			
50-00-0	Formaldehyde ... %					
	oral	ATE	100 mg/kg			
	dermal	ATE	300 mg/kg			
	inhalative vapour	ATE	3 mg/l			
	inhalative aerosol	ATE	0,5 mg/l			

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
1310-58-3	caustic potash, potassium hydroxide					
	Acute fish toxicity	LC50	80 mg/l	96 h	Gambusia affinis	IUCLID
107-22-2	Ethandial ... %; glyoxal					
	Acute fish toxicity	LC50	215 mg/l	96 h		GESTIS

#### **12.2. Persistence and degradability**

No further Information available.

#### **12.3. Bioaccumulative potential**

No further Information available.

#### **12.4. Mobility in soil**

No further Information available.

#### **12.5. Results of PBT and vPvB assessment**

PBT: not applicable. vPvB: not applicable

#### **12.6. Other adverse effects**

No further Information available.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 7 of 9

#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

###### Advice on disposal

Dispose of waste according to applicable legislation.  
Containers emptied of residues have to be recycled. Containers emptied of residues may still contain hazardous material. Containers not emptied should be removed harmlessly according to the actual disposal guidelines.

###### Waste disposal number of waste from residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

###### Waste disposal number of used product

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

#### SECTION 14: Transport information

##### Land transport (ADR/RID)

<b>14.1. UN number:</b>	UN 2924
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (KALIUMHYDROXID, ETHANOL(ETHYLALKOHOL))
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	III
Hazard label:	3+8
Classification code:	FC
Special Provisions:	274
Limited quantity:	5 L
Transport category:	3
Hazard No:	38
Tunnel restriction code:	D/E

###### Other applicable information (land transport)

E1  
E2

##### Inland waterways transport (ADN)

<b>14.1. UN number:</b>	UN 2924
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (KALIUMHYDROXID, ETHANOL(ETHYLALKOHOL))
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	III
Hazard label:	3+8
Classification code:	FC
Special Provisions:	274
Limited quantity:	5 L

###### Other applicable information (inland waterways transport)

E2  
E1

##### Marine transport (IMDG)

<b>14.1. UN number:</b>	UN 2924
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## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 8 of 9

**14.2. UN proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (KALIUMHYDROXID, ETHANOL(ETHYLALKOHOL))

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3+8

Special Provisions: 223, 274

Limited quantity: 5 L

EmS: F-E, S-C

**Other applicable information (marine transport)**

E1

E2

**Air transport (ICAO)**

**14.1. UN number:** UN 2924

**14.2. UN proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (KALIUMHYDROXID, ETHANOL(ETHYLALKOHOL))

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3+8

Special Provisions: A3

Limited quantity Passenger: 1 L

IATA-packing instructions - Passenger: 354

IATA-max. quantity - Passenger: 5 L

IATA-packing instructions - Cargo: 365

IATA-max. quantity - Cargo: 60 L

**Other applicable information (air transport)**

E1

Passenger-LQ: Y344

E2

Passenger-LQ: Y340

Passenger-LQ: Y342

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

## SECTION 15: Regulatory information

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

**National regulatory information**

Water contaminating class (D): 1 - slightly water contaminating

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

**Abbreviations and acronyms**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the

International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)





## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Bohricin

Print date: 14.04.2014

Page 9 of 9

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

#### Full text of R phrases referred to under Sections 2 and 3

- 10 Flammable.
- 11 Highly flammable.
- 20 Harmful by inhalation.
- 22 Harmful if swallowed.
- 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- 34 Causes burns.
- 35 Causes severe burns.
- 36 Irritating to eyes.
- 36/38 Irritating to eyes and skin.
- 40 Limited evidence of a carcinogenic effect.
- 43 May cause sensitisation by skin contact.
- 67 Vapours may cause drowsiness and dizziness.
- 68 Possible risks of irreversible effects.

#### Full text of H statements referred to under Sections 2 and 3

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.

#### Further Information

The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product. It is not to be considered as a guarantee of the product's properties.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*