according to Regulation (EC) No. 1907/2006 (REACH)

Trade name : ID 220 Bur disinfection

Revision: 03.05.2014 **Version (Revision):** 2.0.0 (1.0.0)

Date of print : 03.05.2014

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

1.1 Product identifier

ID 220 Bur disinfection

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

Relevant identified uses

ID 220 is a ready-diluted solution for the disinfection and cleaning of rotary instruments (drills, diamonds, root canal instruments etc.).

Product categories [PC]

PC0 - Other Disinfectants

Uses advised against

None, if handled according to order.

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

orochemie GmbH + Co. KG

Street: Max-Planck-Straße 27

Postal code/city: 70806 Kornwestheim

Telephone: +49 7154 1308-0 **Telefax:** +49 7154 1308-40

Information contact: DÜRR DENTAL AG, Höpfigheimer Straße 17, 74321 Bietigheim-Bissingen, Germany

Tel: +49 7142 705-0, Fax: +49 7142 705-500, info@duerr.de

in Great Britain/Ireland:

DÜRR DENTAL [Products] UK Ltd., 14 Linnell Way - Telford Way Industrial Estate, Kettering Northants NN16 8PS,

United Kingdom

Tel: +44 1536 526740, Fax.: +44 1536 526749, info@duerruk.com

1.4 Emergency telephone number

INT: +49 6132 84463 (24 h/7 d)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Dam. 1; H318 - Serious eye damage/eye irritation: Category 1; Causes serious eye damage.

Skin Irrit. 2; H315 - Skin corrosion/irritation: Category 2; Causes skin irritation.

Flam. Liq. 3; H226 - Flammable liquids: Category 3; Flammable liquid and vapour.

Classification procedure

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

Classification according to Directive 1999/45/EC

Risk of serious damage to eyes. 'Vapours may cause drowsiness and dizziness.

Xi; R 41 · Xi; R 38 · R 67

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

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Flame (GHS02) · Corrosion (GHS05)

Signal word

Danger

Hazard components for labelling

1-PROPANOL; CAS No.: 71-23-8

POTASSIUM HYDROXIDE; CAS No.: 1310-58-3

Hazard statements

H226 Flammable liquid and vapour. H318 Causes serious eye damage. H315 Causes skin irritation.

Precautionary statements

P211 Do not spray on an open flame or other ignition source. P280 Wear protective gloves and eye/face protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container to hazardous or special waste collection point.

Labelling (1999/45/EC)

Hazard symbols and hazard statements of dangerous substances and preparations



Xi ; Irritant

Hazard components for labelling

POTASSIUM HYDROXIDE; CAS No.: 1310-58-3

R-phrases

41 Risk of serious damage to eyes.

38 Irritating to skin.

Vapours may cause drowsiness and dizziness.

S-phrases

37/39 Wear suitable gloves and eye/face protection.

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

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description

ID 220 contains alcohols, potassium hydroxide, corrosion inhibitors and auxiliary agents in aqueous solution.

Hazardous ingredients

 $1-PROPANOL\ ;\ REACH\ registration\ No.: 01-2119486761-29\ ;\ EC\ No: 200-746-9;\ CAS\ No.: 71-23-8$

Weight fraction : 15 - 20 %

Classification 67/548/EEC : F ; R11 $\,$ Xi ; R41 $\,$ R67

Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Dam. 1 ; H318 STOT SE 3 ; H336

POTASSIUM HYDROXIDE; REACH registration No.: 01-2119487136-33; EC No: 215-181-3; CAS No.: 1310-58-3

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Weight fraction: 1 - 2 % Classification 67/548/EEC: C; R35 Xn; R22

Classification 1272/2008 [CLP]: Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 Acute Tox. 4; H302

Additional information

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact

Wash with plenty of water. When in doubt or if symptoms are observed, get medical advice.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

If swallowed, mmediately drink: Water Never give anything by mouth to an unconscious person or a person with cramps. Do not induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye damage. Irritating to skin.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Extinguishing powder. Water spray. Water mist. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

High power water jet.

5.2 Special hazards arising from the substance or mixture

None known.

Hazardous combustion products

None known.

5.3 Advice for firefighters

Adapt protective equipment to surrounding fire.

Special protective equipment for firefighters

Adapt protective equipment to surrounding fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. See protective measures under point 7 and 8.

For non-emergency personnel

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Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders

Personal protection equipment

See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Other information

Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

None

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide adequate ventilation. Please note safety instructions and directions for use on the drum. Open and handle container with care. Provide adequate ventilation. Do not breathe aerosol.

Protective measures

Fire prevent measures

Keep away from sources of ignition. - No smoking. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed. Keep in a cool, well-ventilated place. Do not store in temperatures below 5 $^{\circ}$ C.

Hints on joint storage

Do not store together with oxidizing, self-igniting substances and highly flammable solid substances. Store the foodstuffs separately.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

1-PROPANOL; CAS No.: 71-23-8

POTASSIUM HYDROXIDE; CAS No.: 1310-58-3
Limit value type (country of origin): TLV/STEL (GB)
Limit value: 2 mg/m³

DNEL/DMEL and PNEC values

There are no data available on the preparation itself.

DNEL/DMEL

Limit value type: DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Inhalation
Exposure frequency : Short-term (acute)
Limit value : 1036 mg/m³

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Limit value type: DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Dermal

Exposure frequency: Long-term (repeated)

Limit value : 81 mg/kg

Limit value type: DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route: Inhalation

Exposure frequency: Long-term (repeated)

Limit value: 80 mg/m³

Limit value type: DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route: Oral

Exposure frequency: Long-term (repeated)

Limit value : 61 mg/kg

Limit value type: DNEL/DMEL (Worker, Systemic) (1-PROPANOL; CAS No.: 71-23-8)

Exposure route: Inhalation
Exposure frequency: Short-term (acute)
Limit value: 1723 mg/m³

Limit value type : DNEL/DMEL (Worker, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)

Exposure route : Dermal

Exposure frequency: Long-term (repeated)

Limit value: 136 mg/kg

Limit value type: DNEL/DMEL (Worker, Systemic) (1-PROPANOL; CAS No.: 71-23-8)

Exposure route : Inhalation

Exposure frequency: Long-term (repeated)

Limit value: 268 mg/m³

PNEC

Limit value type: PNEC aquatic, freshwater (1-PROPANOL ; CAS No. : 71-23-8)

Limit value : 10 mg/l

Limit value type: PNEC aquatic, marine water (1-PROPANOL; CAS No.: 71-23-8)

Limit value : 1 mg/l

Limit value type: PNEC (Industrial) (1-PROPANOL; CAS No.: 71-23-8)

Exposure route : Soil
Limit value : 2,2 mg/kg

Limit value type: PNEC sediment, freshwater (1-PROPANOL; CAS No.: 71-23-8)

Limit value : 22,8 mg/kg

Limit value type : PNEC sediment, marine water (1-PROPANOL ; CAS No. : 71-23-8)

Limit value : 2,28 mg/kg

8.2 Exposure controls

Personal protection equipment

Eye / face protection

Eye glasses with side protection DIN EN 166

Skin protection

Hand protection

Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm.

Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Body protection

Body protection: not applicable.

Respiratory protection

Usually no personal respirative protection necessary.

General health and safety measures

Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothes. Remove

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contaminated, saturated clothing. Wash hands before breaks and after work. Separate storage of work clothes. When using do not eat, drink, smoke, sniff.

Occupational exposure controls

Technical measures to prevent exposure

Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid
Colour: blue
Odour: Alcohol

Safety relevant basis data

Melting point / melting range: No data available (1013 hPa) Boiling temperature / boiling range (1013 hPa) °C 100 ca. (1013 hPa) No data available **Decomposition temperature:** Flash point: °C 33 Ignition temperature: 360 °C Lower explosion limit: 2,1 Vol-%

 Upper explosion limit :
 13,5
 Vol-%

 Density :
 $(20 \, ^{\circ}\text{C})$ 0,97 - 1,01
 g/cm³

 Solvent separation test :
 $(20 \, ^{\circ}\text{C})$
 3
 %

 We have a labelity and the separation test :
 $(20 \, ^{\circ}\text{C})$
 100 $^{\circ}$ When the separation test :

Water solubility: (20 °C) 100 Wt % pH value: 12,9 - 13,9

Flow time : (20 °C) < 20 s DIN-cup 4 mm

Odour threshold : No data available

Oxidising liquids:

Explosive properties:

Not applicable.

Not applicable.

Not corrosive to metals:

Not corrosive to metals.

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

None, if handled according to order.

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7). Reactions with acids: development of heat.

10.3 Possibility of hazardous reactions

Reactions with acids possible

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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Acute effects

Acute oral toxicity

Parameter: LD50 Exposure route: Oral Species: Rat Effective dose: 5078 mg/kg Methode: **OECD 401**

Practical experience/human evidence

Skin and eye contact: frequent and long lasting contact may cause irritation and skin inflammation.

Irritant and corrosive effects

Causes serious eye damage. Irritating to skin.

Sensitisation

No data available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

None known.

11.4 Additional information

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

There are no data available on the preparation itself.

Acute (short-term) fish toxicity

LC50 (POTASSIUM HYDROXIDE; CAS No.: 1310-58-3) Parameter:

Species: Gambusia affinis (Mosquito fish) Evaluation parameter: Acute (short-term) fish toxicity

Effective dose: 80 mg/l Exposure time: 96 h

Parameter: LC50 (1-PROPANOL; CAS No.: 71-23-8) Species: Pimephales promelas (fathead minnow) Acute (short-term) fish toxicity Evaluation parameter :

Effective dose: 4480 mg/l

Exposure time: 96 h

Parameter: LC50 (POTASSIUM HYDROXIDE; CAS No.: 1310-58-3)

Species: Poecilia reticulata (Guppy) Acute (short-term) fish toxicity Evaluation parameter:

Effective dose: 165 mg/l Exposure time: 24 h Acute (short-term) daphnia toxicity

Parameter: EC50 (1-PROPANOL; CAS No.: 71-23-8)

Species : Daphnia magna (Big water flea) Evaluation parameter: Acute (short-term) daphnia toxicity

Effective dose: 3644 mg/l Exposure time: 48 h

Acute (short-term) algae toxicity

EC50 (1-PROPANOL; CAS No.: 71-23-8) Parameter:

Species: Scenedesmus subspicatus Evaluation parameter: Inhibition of growth rate

Effective dose: 3100 mg/l 168 h Exposure time:

Bacteria toxicity

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Parameter: EC50 (POTASSIUM HYDROXIDE ; CAS No. : 1310-58-3)

Evaluation parameter : Bacteria toxicity
Effective dose : 22 mg/l
Exposure time : 0,25 h

Parameter: EC50 (1-PROPANOL; CAS No.: 71-23-8)

Species: Pseudomonas putida
Evaluation parameter: Bacteria toxicity
Effective dose: 2700 mg/l
Exposure time: 16 h

12.2 Persistence and degradability

Abiotic degradation

No data available.

Biodegradation

The product is easily biodegradable according to OECD criteria. OECD 301 D. In case of appropriate conduction into adapted biological purification plants no disturbances have to be expected.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

There are no data available on the preparation itself.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

12.7 Further ecological information

Prevent from flowing into surface water/ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes / waste designations according to EWC

Waste code product

Concentrate/larger quantities: 18 01 06* (disinfectant).

Waste treatment options

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number

UN 2924

14.2 UN proper shipping name

Land transport (ADR/RID)

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (N-PROPANOL · POTASSIUM HYDROXIDE)

Sea transport (IMDG)

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (N-PROPANOL · POTASSIUM HYDROXIDE)

Air transport (ICAO-TI / IATA-DGR)

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FLAMMABLE LIQUID, CORROSIVE, N.O.S. (N-PROPANOL · POTASSIUM HYDROXIDE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es): 3
Classification code: FC
Hazard identification number (Kemler
No.): 38
Tunnel restriction code: D/E

Special provisions: LQ 5 | · Q 7 · E 1

Hazard label(s): 3 / 8

Sea transport (IMDG)

 Class(es):
 3

 EmS-No.:
 F-E / S-C

 Special provisions:
 LQ 5 | · E 1

 Hazard label(s):
 3 / 8

Air transport (ICAO-TI / IATA-DGR)

Class(es): 3 / 8
Special provisions: E 1
Hazard label(s): 3 / 8

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID): No Sea transport (IMDG): No

Air transport (ICAO-TI / IATA-DGR): No

14.6 Special precautions for user

None

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

National regulations

Restrictions of occupation

According to directive 94/33/EC, juveniles are only allowed to handle this product as long as all effects of dangerous substances are prevented. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling

16.2 Abbreviations and acronyms

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimates

CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

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CMR = Carcinogen, Mutagen or Reproductive toxicant

 CO_2 = Carbon dioxide

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EC = European Commission

EC50 = Half maximal effective concentration

EN = European Standard (Norm)

EU = European Union

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

H statement = GHS Hazard statement

IATA = International Air Transport Association ICAO-TI = International Civil Aviation Organization-Technical Instructions

IMDG = International Maritime Dangerous Goods

LC50 = Median lethal concentration

LD50 = Median lethal dose

LogPow = Logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol

of 1978. ("Marpol" = marine pollution)

NOEC/NOEL = No observed effect concentration/level

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No.

1907/2006]

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RMM = Risk Management Measure

RRN = REACH Registration Number

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

SVHC = Substances of Very High Concern

TLV/STEL = Threshold limit value/short-term exposure limit

TLV/TWA = Threshold limit value/time weighted average

UN = United Nations

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

16.4 Relevant R-, H- and EUH-phrases (Number and full text)

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H290 May be corrosive to metals.
H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
Highly flammable.

Highly flammable.

Harmful if swallowed.

Causes severe burns.

Irritating to skin.

41 Risk of serious damage to eyes.

67 Vapours may cause drowsiness and dizziness.

16.5 Training advice

None

16.6 Additional information

Notice the directions for use on the label.

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Dipl. Ing. Elisabeth Gehring Tel. No.: +49 7154 1308-37

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.

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