

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Dentalrapid SD liquid, lemon

Print date: 03.05.2016

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

### 1.1. Product identifier

Dentalrapid SD liquid, lemon

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

#### Use of the substance/mixture

Alcoholic rapid disinfection

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

Company name:	Müller-Omicron GmbH&Co. KG		
Street:	Schlosserstrasse 1		
Place:	D-51798 Lindlar		
Telephone:	+49 2266 4742 0	Telefax:	+49 2266-4742-26
e-mail:	info@mueller-omicron.de		
Contact person:	qualified person	Telephone:	+49 (0) 2266-4742-0
e-mail:	sds@mueller-omicron.de		
Internet:	www.mueller-omicron.de		

### 1.4. Emergency telephone number:

Emergency CONTACT (24-Hours-Number):GBK GmbH +49 (0)613284463

### Further Information

This data sheet replaces the previous sheet.  
The sections affected are listed in heading 16.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:  
Flammable liquid: Flam. Liq. 3  
Serious eye damage/eye irritation: Eye Irrit. 2  
Hazardous to the aquatic environment: Aquatic Chronic 3  
Hazard Statements:  
Flammable liquid and vapour.  
Causes serious eye irritation.  
Harmful to aquatic life with long lasting effects.

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



#### Hazard statements

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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- 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.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P370+P378 In case of fire: Use foam, powder or carbon dioxide to extinguish.  
P403+P235 Store in a well-ventilated place. Keep cool.

#### Special labelling of certain mixtures

- EUH208 Contains polyhexamethylene biguanide hydrochloride. May produce an allergic reaction.  
Restricted to professional users.  
Read attached instructions before use.

#### Additional advice on labelling

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

#### 2.3. Other hazards

- slightly hazardous to water (WGK 1)  
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
The components in this formulation do not meet the criteria for classification as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64-17-5	ethanol, ethyl alcohol			25 - < 30 %
	200-578-6		01-2119457610-43	
	Flam. Liq. 2; H225			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			10 - < 15 %
	200-661-7		01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
27083-27-8	polyhexamethylene biguanide hydrochloride			< 1 %
	-	616-207-00-X		
	Carc. 2, Acute Tox. 4, STOT RE 1, Eye Dam. 1, Skin Sens. 1B, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H351 H302 H372 H318 H317 H400 H410			

Full text of H and EUH statements: see section 16.

#### Further Information

Note: The danger characteristics and R-Phrases refer to the properties of the neat substances.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### After inhalation

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a doctor.

##### After contact with skin

After contact with skin, wash immediately with: Water and soap. In case of skin irritation, seek medical treatment.

##### After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

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**After ingestion**

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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

No information available.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

alcohol resistant foam Water mist Extinguishing powder.

**Unsuitable extinguishing media**

High power water jet.

**5.2. Special hazards arising from the substance or mixture**In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO<sub>2</sub>).**5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes.

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Can become highly flammable in use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

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

Personal precautions See protective measures under point 7 and 8.

**6.2. Environmental precautions**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Take up mechanically. Suitable material for taking up:

Universal binding agent.

Treat the recovered material as prescribed in the section on waste disposal. Wash with plenty of water.

**6.4. Reference to other sections**

isolate damaged containers and seal. Keep away from sources of ignition.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Use only in well-ventilated areas.

Do not breathe gas/fumes/vapour/spray.

Avoid contact with eyes.

**Advice on protection against fire and explosion**

Precautions against fire and explosion: Keep away from sources of ignition. - No smoking. Keep away from hot surfaces.

**Further information on handling**

The product is: Flammable.

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

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#### Requirements for storage rooms and vessels

Store in a well-ventilated place away from heat and ignition.  
Storage in the original containers delivery is permitted.  
Container tightly after removal of product.

#### Advice on storage compatibility

Do not store together with:  
self-igniting material  
igniting (oxidating) materials  
Material, combustible.  
material, flammable.  
alkali metals

#### 7.3. Specific end use(s)

No special handling instructions are necessary.

### 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
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

#### 8.2. Exposure controls

##### Eye/face protection

Tightly sealed safety glasses.

##### Hand protection

Tested protective gloves must be worn  
Nitrile rubber (NBR), recommended material thickness: = 0,35 mm, Breakthrough time: = 480 Min.  
Butyl rubber, recommended material thickness = 0.5 mm, Breakthrough time: = 480 Min.  
The selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.  
Details of the protective gloves producers on penetration and breakthrough times and the specific Workplace conditions (mechanical strain, duration of contact) note.  
At the first sign of wear and tear, the gloves should be replaced.  
Not suitable are gloves made of the following materials:  
PVC gloves.  
Natural rubber (latex)

##### Skin protection

Overall.

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

##### Respiratory protection

Respiratory protection necessary at:  
insufficient ventilation.  
Handling larger quantities.  
exceeding exposure limit values  
Suitable respiratory protective equipment:

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Full-/Half-/Quarter-Masks (DIN EN 136/140).  
Typ A , AX

#### Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

## SECTION 9: Physical and chemical properties

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

Physical state: liquid  
Colour: colorless  
Odour: lemon

#### Test method

pH-Value (at 20 °C): 6

#### Changes in the physical state

Melting point: < 0 °C  
Initial boiling point and boiling range: >80 °C  
Sublimation point: not applicable  
Softening point: not applicable  
Pour point: not applicable  
Flash point: 25 °C  
Sustaining combustion: Not sustaining combustion

#### Flammability

Solid: not applicable  
Gas: not applicable

#### Explosive properties

The product is not explosive, however, formation of explosive air / vapor mixtures possible.

Lower explosion limits: 2 vol. %  
Upper explosion limits: 15 vol. %  
Ignition temperature: 400 °C

#### Auto-ignition temperature

Solid: not applicable  
Gas: not applicable

#### Oxidizing properties

product not potentially explosive but may form flammable/explosive vapour-air mixtures

Vapour pressure: 58 hPa  
(at 20 °C)  
Vapour pressure: 293 hPa  
(at 50 °C)  
Density (at 20 °C): 0,940 g/cm<sup>3</sup>  
Bulk density: not applicable  
Water solubility: complete

#### Solubility in other solvents

Alcohols

Viscosity / dynamic: low  
Flow time: No data available

### 9.2. Other information

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Solid content:

not applicable

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Prolonged exposure to direct and intensive sunlight may form explosive peroxides in the product

### 10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

not known

### 10.4. Conditions to avoid

High temperatures.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

No information available.

### Further information

not known

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicocinetics, metabolism and distribution

Based on available data, the classification criteria are not met.

#### Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
64-17-5	ethanol, ethyl alcohol			
	oral	LD50 10470 mg/kg	rat	OECD 401
	dermal	LD50 >2000 mg/kg	rabbit	OECD 402
	inhalative (4 h) vapour	LC50 117-125 mg/l	rat	OCD 403
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
	oral	LD50 5045 mg/kg	rat	
	dermal	LD50 12800 mg/kg	rabbit	
27083-27-8	polyhexamethylene biguanide hydrochloride			
	oral	ATE 500 mg/kg		

#### Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

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#### Sensitising effects

Based on available data, the classification criteria are not met.

-

#### Carcinogenic/mutagenic/toxic effects for reproduction

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Based on available data, the classification criteria are not met.

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#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

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#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Specific effects in experiment on an animal

Based on available data, the classification criteria are not met.

#### Additional information on tests

Based on available data, the classification criteria are not met.

#### Practical experience

#### Observations relevant to classification

Based on available data, the classification criteria are not met.

#### Other observations

Causes skin irritation.

Skin Irrit. 2

#### Further information

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

Under normal use no environmental effects are to be expected.

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d]	Species	Source
64-17-5	ethanol, ethyl alcohol				
	Acute fish toxicity	LC50 13000 mg/l	96 h	Oncorhynchus mykiss	OECD 203
	Acute algae toxicity	ErC50 275 mg/l	72 h	Algae	OECD 201
	Acute crustacea toxicity	EC50 12340 mg/l	48 h	Daphnia magna	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna	

### 12.2. Persistence and degradability

poly(hexamethylenebiguanide) hydrochloride Hint: Not easily biologically degradable.

### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,32
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05

### 12.4. Mobility in soil

not known

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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#### 12.6. Other adverse effects

May cause drowsiness or dizziness.

Other ecological details:

poly(hexamethylenebiguanide) hydrochloride:

cationic compounds will be absorbed via complexation during waste water regeneration.

#### Further information

slightly hazardous to water (WGK 1)

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Advice on disposal

Dispose of waste according to applicable legislation. Hand over to officially registered waste disposal company.

##### 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

##### Contaminated packaging

Return to supplier or disposal companies.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

<b>14.1. UN number:</b>	UN 1987
<b>14.2. UN proper shipping name:</b>	ALCOHOLS, N.O.S.
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	III
Hazard label:	3



Classification code:	F1
Special Provisions:	274 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

#### Inland waterways transport (ADN)

<b>14.1. UN number:</b>	UN 1987
<b>14.2. UN proper shipping name:</b>	ALCOHOLS, N.O.S.
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	III
Hazard label:	3



Classification code:	F1
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Special Provisions: 274 601  
 Limited quantity: 5 L  
 Excepted quantity: E1

#### Marine transport (IMDG)

**14.1. UN number:** UN 1987  
**14.2. UN proper shipping name:** ALCOHOLS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Special Provisions: 223, 274  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-E, S-D

#### Air transport (ICAO)

**14.1. UN number:** UN 1987  
**14.2. UN proper shipping name:** ALCOHOLS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Special Provisions: A3 A180  
 Limited quantity Passenger: 10 L  
 Passenger LQ: Y344  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 355  
 IATA-max. quantity - Passenger: 60 L  
 IATA-packing instructions - Cargo: 366  
 IATA-max. quantity - Cargo: 220 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No special handling instructions are necessary.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not classified for this transport way.

#### Other applicable information

No information available.

### SECTION 15: Regulatory information

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

##### EU regulatory information

2010/75/EU (VOC): 11,8 % (110,92 g/l)  
 2004/42/EC (VOC): 11,8 % (110,92 g/l)

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#### National regulatory information

Employment restrictions: Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:  
propan-2-ol; isopropyl alcohol; isopropanol

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 3,5,7,9,11,16.

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

P: Marine Pollutant

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

#### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains polyhexamethylene biguanide hydrochloride. May produce an allergic reaction.

#### Further Information

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