

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

1.1. Product identifier

DENTOSUC SPEZIAL 2%

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

Use of the substance/mixture

Disinfectant for dental suction systems

Product for professional use

1.3. Details of the supplier of the safety data sheet

Company name: Müller-Omicron GmbH & Co. KG

Street: Schlosserstr. 1

Place: D-51789 Lindlar

Telephone +49 (0) 2266/4742-0

Telefax +49 (0) 2266/3417

e-mail: einkauf@mueller-omicron.de

Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number: Emergency telephone :+49 (0) 6132 / 84463 (GBK GmbH, Ingelheim)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: Xi - Irritant

R phrases:

Irritating to eyes and skin.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS classification

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Causes severe skin burns and eye damage.

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label

N-Decyl-N-isononyl-N,N-dimethylammonium chloride

Signal word: Danger

Pictograms: GHS05



Hazard statements

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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.

P273 Avoid release to the environment.

2.3. Other hazards

Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aqueous solution

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
200-661-7	Propan-2-ol	< 10 %
67-63-0	F - Highly flammable, Xi - Irritant R11-36-67	
603-117-00-0	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	
01-211945582-50		
	N-Decyl-N-isononyl-N,N-dimethylammonium chloride	< 10 %
138698-36-9	C - Corrosive, Xn - Harmful, N - Dangerous for the environment R22-34-50	
	Acute Tox. 4, Skin Corr. 1B, Aquatic Acute 1; H302 H314 H400	
203-961-6	2-(2-Butoxyethoxy)ethanol	< 10 %
112-34-5	Xi - Irritant R36	
603-096-00-8	Eye Irrit. 2; H319	
01-2119475104-44		

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products.
In the event of symptoms refer for medical treatment.

After contact with skin

Wash off immediately with soap and plenty of water.
Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical treatment by eye specialist.

After ingestion

Do not provoke vomiting. Consult physician. Attention in case of vomiting - acute danger of suffocating, produced by foaming ingredients. Rinse mouth. Make drink some glasses of water. The decision whether to provoke vomiting is to be taken by a physician.

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

Causes severe skin burns and eye damage.
Watch out. Beware, hazard of foam aspiration.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x).
Chlorine compounds.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.

Ensure adequate ventilation.

Use personal protective clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Avoid contact with skin, eyes and clothing.

Use only in well-ventilated areas.

Advice on protection against fire and explosion

No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a dry, well-ventilated place.

Do not use metal containers.

Advice on storage compatibility

Incompatible with strong acids and oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Disinfectant for dental suction systems

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		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

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using do not eat or drink.

Remove and wash contaminated clothes before re-use.

Eye/face protection

Eye wash bottle with pure water (EN 15154).

Safety goggles with side protection (EN 166).

Hand protection

PVC or other plastic material gloves.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (EN 368).

Respiratory protection

No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Mild
pH-Value:	9 - 11
Flash point:	> 61 °C
Lower explosion limits:	n.d.
Upper explosion limits:	
Density (at 20 °C):	0,97 - 0,99 g/cm ³
Water solubility: (at 20 °C)	Miscible
Ignition temperature:	n.d.

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with oxidizing agents.

Exothermic reaction with strong acids.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Strong acids and oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x).
Chlorine compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

No toxicological data available.

ATEmix/oral: > 2000 mg/kg

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
67-63-0	Propan-2-ol				
	oral	LD50	5050 mg/kg	Rat	
	dermal	LD50 mg/kg	12800	Rabbit	
138698-36-9	N-Decyl-N-isononyl-N,N-dimethylammonium chloride				
	oral	LD50	320 mg/kg	Rat	OECD 401
112-34-5	2-(2-Butoxyethoxy)ethanol				
	oral	LD50	5660 mg/kg	Rat	
	dermal	LD50	4120 mg/kg	Rabbit	

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Carcinogenicity: Not classified.

Mutagenicity: Not classified.

Reproductive toxicity: Not classified.

Aspiration hazard

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

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations

Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

Watch out. Beware, hazard of foam aspiration.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
67-63-0	Propan-2-ol					
	Acute fish toxicity	LC50	> 1000 mg/l	96 h		
	Acute crustacea toxicity	EC50	> 1000 mg/l	48 h		
138698-36-9	N-Decyl-N-isononyl-N,N-dimethylammonium chloride					
	Acute fish toxicity	LC50	0,85 mg/l	96 h	Lepomis macrochirus	OECD 203
	Acute crustacea toxicity	EC50	0,11 mg/l	48 h	Daphnia magna	OECD 202
112-34-5	2-(2-Butoxyethoxy)ethanol					
	Acute algae toxicity	ErC50	> 100 mg/l		Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50	> 100 mg/l	48 h	Daphnia magna	

12.2. Persistence and degradability

N-Decyl-N-isononyl-N,N-dimethylammonium chloride

Biodegradable (OECD): 66,3% (OECD 302 A)

12.3. Bioaccumulative potential

No data available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-Butoxyethoxy)ethanol	0,56 (25°C)

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

Hazardous water pollutant.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Where possible recycling is preferred to disposal.

Can be disposed of after chemical and physical treatment, when in compliance with local regulations.

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

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN 1903

14.2. UN proper shipping name:DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(N-Decyl-N-isononyl-N,N-dimethylammonium chloride)**14.3. Transport hazard class(es):**

8

14.4. Packing group:

III

Hazard label:

8



Classification code: C9
 Limited quantity: 5 L / 30 kg
 Transport category: 3
 Hazard No: 80
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1903
14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
 (N-Decyl-N-isononyl-N,N-dimethylammonium chloride)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C9
 Limited quantity: 5 L / 30 kg

Marine transport (IMDG)

14.1. UN number: UN 1903
14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
 (N-Decyl-N-isononyl-N,N-dimethylammonium chloride)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Marine pollutant: No
 Limited quantity: 5 L / 30 kg
 EmS: F-A, S-B

Air transport (ICAO)

14.1. UN number: UN 1903
14.2. UN proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
 (N-Decyl-N-isononyl-N,N-dimethylammonium chloride)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Limited quantity Passenger: Y841 / 1 L
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Take the usual precautions when handling with chemicals.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

1999/13/EC (VOC): < 10%

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC = Code International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

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

- | | |
|-------|---|
| 11 | Highly flammable. |
| 22 | Harmful if swallowed. |
| 34 | Causes burns. |
| 36 | Irritating to eyes. |
| 36/38 | Irritating to eyes and skin. |
| 50 | Very toxic to aquatic organisms. |
| 52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 67 | Vapours may cause drowsiness and dizziness. |

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

- | | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents

and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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