according to Regulation (EC) No 1907/2006

Trade name: **Dentosept® S**

Issue/Revision: 27.01.2017Version: 1.1Print date: 27.01.2017Replaces version: 1.0

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

1.1 Product identifier

Trade name: Dentosept® S

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

Relevant identified uses: Disinfecting agent

Intended purpose: 1.41% hydrogen peroxide solution for disinfecting

treatment water in dental treatment units.

Uses advised against: None at intended use.

Note: The product is intended for professional users.

1.3. Details of the supplier of the safety data sheet

Supplier: Sirona Dental Systems GmbH

Fabrikstr. 31

D-64625 Bensheim (Germany) Telephone: +49 6251 16-1670 E-mail: contact@sirona.com Internet: www.sirona.com

Manufacturer: ALPRO MEDICAL GMBH

Mooswiesenstraße 9

D-78112 St. Georgen (Germany)

E-mail address for the competent person

responsible for the safety data sheet: doku@alpro-medical.de

1.4. Emergency telephone number

In-house emergency telephone number: +49 7725 9392-0 (ALPRO MEDICAL GMBH)

Monday – Friday from 08:00 am to 04:30 pm (UTC+1); for chemical information and legal information on

hazardous substances only

Poison centre: +49 761 19240

Poisoning information centre, Freiburg, Germany

(24 h / 7 d), English is spoken

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 [CLP]

The mixture is not classified as hazardous in the sense of Regulation (EC) No 1272/2008 [CLP].

Classification in accordance with Directive 1999/45/EC

see SECTION 16.1.

2.2. Label elements

Label elements in accordance with Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms: -

Signal word:

Hazard components

for labelling:

according to Regulation (EC) No 1907/2006

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H-phrases: -

EUH-phrases: EUH210 Safety data sheet available on request.

P-phrases:

Label elements in accordance with Directive 1999/45/EC

see SECTION 16.2.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII.

No further hazards known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterisation: Mixture of substances listed below with non-hazardous additions in

aqueous solution.

Hazardous ingredients

Chemical name	Identification numbers	Classification	Classification	Weight %
		in accordance	in accordance with	
		with Directive	Regulation (EC)	
		67/548/EEC	No 1272/2008	
Hydrogen peroxide	CAS No: 7722-84-1	R5	Ox. Liq. 1; H271: C ≥ 70 %	≥ 1.2 - < 1.6
solution %	EC No: 231-765-0	O; R8	Acute Tox. 4; H332	
	Index No: 008-003-00-9	C; R35	Acute Tox. 4; H302	
	REACH Registration No:	Xn; R20/22	Skin Corr. 1A; H314: C ≥ 70 %	
	01-2119485845-22-XXXX	Xi; R37	STOT SE 3; H335: C ≥ 35 %	
		R52/53	Aquatic Chronic 3; H412:	
			C ≥ 63 %	
			(further specific concentration	
			limits: see ECHA -> Registered	
			substances)	

Full text of code letters, hazard classes, R- and H-phrases: see SECTION 16.3.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: First aider: Pay attention to self-protection!

Following inhalation: Supply fresh air. In case of complaints consult a physician.

Following skin contact: By way of precaution, wash skin with water and soap. In case of skin

reactions, consult a physician.

Following eye contact: Flush eyes with flowing water for several minutes holding eyelids apart.

Remove contact lenses, if present and easy to do.

Following ingestion: Rinse mouth with water. Let drink water.

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

None known.

according to Regulation (EC) No 1907/2006

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray jet, alcohol resistant foam, extinguishing powder,

carbon dioxide (CO₂)

Unsuitable extinguishing media: Full water jet

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: none

5.3. Advice for firefighters

Special protective equipment: Not necessary

Further information: Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Use personal protective equipment. See SECTION 8.2.

Avoid skin and eye contact. Special danger of slipping by leaked/spilled product.

For emergency responders

Use personal protective equipment. See SECTION 8.2.

6.2. Environmental precautions

Not necessary

6.3. Methods and material for containment and cleaning up

Containment

Not necessary

Cleaning up

Wipe up small amounts with absorbent material (e.g. cloth, fleece). Absorb large amounts with liquid-binding material (sand, diatomaceous earth, universal binder, sawdust).

Other information

Inappropriate containment and cleaning methods are not known.

6.4. Reference to other sections

Information on safe handling see SECTION 7.1.

Information on personal protective equipment see SECTION 8.2.

Information on disposal see SECTION 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

according to Regulation (EC) No 1907/2006

Trade name: **Dentosept® S**

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Precautions

Avoid contact with skin and eyes.

Advice on general occupational hygiene

When using do not eat, drink or smoke. Wash hands before breaks and at end of work. Keep away from food and drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep only in the original container.

Advice on common storage: Not necessary

Further information on storage conditions: Recommended storage temperature: 5 °C - 50 °C

Storage class ([DE] TRGS 510): LGK 12 Non-combustible liquids that are not assigned to

any of the aforementioned LGK

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific end uses are stipulated.

Industry and sector specific guidance

TRGS 525 - Hazardous substances in medical care facilities (Section 7 Activities with [DE]

disinfectants); Issue: September 2014;

Source: GMBI 2014 page 1294-1307 of 13.10.2014 [No 63]; www.baua.de

[DE] DGUV rules 107-002 (former BGR 206) - Disinfection works in health service

Issue: July 1999; Source: www.dguv.de/publikationen

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

	Limit values								
Country	Long term (8 hours)		Short term (15 minutes)		Legal basis	Remarks			
	ррт	mg/m³	ррт	mg/m³					
Hydrogen peroxide solution % (CAS No: 7722-84-1)									
EU						no limit value specified			
UK	1	1.4	2	2.8	EH40				

Used abbreviations, symbols, numerals and explanations in column "Remarks"

Biological limit values

Does not contain substances above concentration limits fixing a biological limit value.

Information on monitoring procedures

BS EN 482:2012-04-30; Title: Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents;

British version of EN 482:2012

BS EN 689:1996-04-15; Title: Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy; British version of EN 689:1995

according to Regulation (EC) No 1907/2006

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BS EN 14042:2003-04-24; Title: Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents; British version of EN 14042:2003

8.2. Exposure controls

Appropriate engineering controls

Technical and organisational protective measures

No special protective measures necessary.

Personal protective equipment

Eye/face protection: Safety glasses with side protection according to EN 166 are

recommended

Skin protection:

Hand protection: Protective gloves according to EN 374 are recommended

Splash guard:

Disposable gloves made of nitrile rubber (thickness 0.11 mm)

Permanent contact (> 480 min):

Protective gloves made of nitrile rubber (thickness 0.40 mm)

Other skin protection: Not necessary when used as intended.

Respiratory protection: Not necessary when used as intended.

Thermal hazards: No special protective measures necessary.

Environmental exposure controls

Not necessary

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: clear, colourless liquid

Odour: characteristic
Odour threshold: no data available

pH (undiluted): 4.0-5.5 (20 °C)

Melting point/freezing point:
Initial boiling point and boiling range:
Initial boiling point and boiling range:
Ino data available
Inot applicable
Evaporation rate:
Ino data available
Inot applicable
Inot applicable
Inot applicable
Upper explosive limit:
Inot applicable
Inot applicable

Vapour pressure: no data available (... °C)

Vapour density: no data available

Relative density: 0.99 - 1.01 (20 °C)

Solubility in water: completely soluble

according to Regulation (EC) No 1907/2006

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Partition coefficient: not applicable

n-octanol/water

Auto-ignition temperature: not applicable

Decomposition temperature: no data available

Viscosity: no data available

Explosive properties: none
Oxidising properties: none

9.2. Other information

Refractive index nD: 1.3330-1.3342 (20 °C) Electrical conductivity (undiluted): 200-300 μ S/cm (20 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when handled and stored as intended.

10.2. Chemical stability

The product is stable when handled and stored as intended.

10.3. Possibility of hazardous reactions

None known

10.4. Conditions to avoid

None known

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Does not decompose when used as intended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Product

Acute toxicity - oral: Acute Toxicity Estimate $ATE_{mix} > 2000 \text{ mg/kg}$

=> no classification

Acute toxicity - dermal: Acute Toxicity Estimate $ATE_{mix} > 2000 \text{ mg/kg}$

=> no classification

Acute toxicity - inhalation: Acute Toxicity Estimate $ATE_{mix} > 20 \text{ mg/l}$

=> no classification

Ingredients

Hydrogen peroxide solution ... % (CAS No: 7722-84-1):

Acute toxicity - oral: LD_{50} : 1193-1270 mg/kg (C = 35 %); species: rat; method: EPA Acute toxicity - dermal: LD_{50} : > 2000 mg/kg (C = 35 %); species: rabbit; method: US-EPA Acute toxicity - inhalation: LC_{50} : 0.17 mg/l / 4 h (C = 50 %); species: rat; method: US-EPA

according to Regulation (EC) No 1907/2006

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Skin corrosion/irritation

Product

No classification. [calculation method]

Serious eye damage/irritation

Product

No classification. [calculation method]

Respiratory or skin sensitisation

Product

No data available.

Germ cell mutagenicity

Product

No data available.

Carcinogenicity

Product

No data available.

Reproductive toxicity

Product

No data available.

STOT-single exposure

Product

No classification. [calculation method]

Ingredients

Hydrogen peroxide solution C ≥ 35 % (CAS No: 7722-84-1):

May cause respiratory irritation.

STOT-repeated exposure

Product

No data available.

Aspiration hazard

Product

No data available.

SECTION 12: Ecological information

12.1. Toxicity

No classification. [calculation method]

12.2. Persistence and degradability

Biodegradability:

The product is biodegradable according to OECD criteria. The statement has been derived from the properties of the ingredients.

according to Regulation (EC) No 1907/2006

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12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal of the product

Product residues must be disposed of as non-hazardous waste in compliance with the Directive 2008/98/EC on waste as well as national and regional regulations. Do not mix with other waste materials.

Waste codes / waste designations according to EWC

Product residues: 16 10 02 aqueous liquid wastes other than those mentioned

in 16 10 01

Disposal of the packaging

Waste codes / waste designations according to EWC

Contaminated packaging: 15 01 02 plastic packaging

Recommendation

Contaminated packaging must be emptied optimally and can be recycled.

SECTION 14: Transport information

14.0. Transport classification

No dangerous good in sense of the transport regulations in road traffic (ADR), railway traffic (RID), inland waterway traffic (ADN), maritime traffic (IMDG-Code) and air traffic (ICAO-TI/IATA-DGR).

14.1. UN number

_

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

_

14.4. Packing group

_

14.5. Environmental hazards

_

according to Regulation (EC) No 1907/2006

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14.6. Special precautions for user

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

_

14.8. Further information

_

SECTION 15: Regulatory information

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

EU-Regulations

REGULATION (EC) No 1005/2009 on substances that deplete the ozone layer

not applicable

REGULATION (EC) No 850/2004 on persistent organic pollutants and amending Directive 79/117/EEC

not applicable

REGULATION (EU) No 649/2012 concerning the export and import of hazardous chemicals

not applicable

DIRECTIVE 2012/18/EU (Seveso III Directive) on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

not applicable

DIRECTIVE 2010/75/EU on industrial emissions (integrated pollution prevention and control)

not applicable

REACH - List of substances subject to authorisation (Annex XIV)

not applicable

REACH – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

not applicable

COUNCIL DIRECTIVE 94/33/EC on the protection of young people at work

not applicable

COUNCIL DIRECTIVE 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding

not applicable

15.2. Chemical safety assessment

For this mixture no chemical safety assessment has been carried out.

SECTION 16: Other information

16.1. Classification in accordance with Directive 1999/45/EC

Not required anymore as it is a new product.

according to Regulation (EC) No 1907/2006

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16.2. Label elements in accordance with Directive 1999/45/EC

Not required anymore as it is a new product.

16.3. Full text of code letters, hazard classes, R- and H-phrases

Code letters and categories of danger

C Corrosive
O Oxidizing
Xi Irritant
Xn Harmful

Hazard classes

Acute Tox. Acute toxicity

Aquatic Chronic Long-term aquatic hazard

Ox. Liq. Oxidising liquid Skin Corr. Skin corrosion

STOT SE Specific target organ toxicity (single exposure)

R-phrases (Indications concerning special risks)

R5 Heating may cause an explosion.

R8 Contact with combustible material may cause fire.

R20/22 Harmful by inhalation and if swallowed.

R35 Causes severe burns.

R37 Irritating to respiratory system.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

H-phrases (Hazard statements)

H271 May cause fire or explosion; strong oxidiser.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

16.4. Abbreviations and acronyms

ADN <u>A</u>ccord européen relatif au transport international des marchandises <u>d</u>angereuses par voie de

navigation intérieure (European Agreement concerning the International Carriage of

Dangerous Goods by Inland Waterways)

ADR <u>Accord européen relatif au transport international des marchandises d</u>angereuses par <u>route</u>

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

BGR <u>Berufsgenossenschaftliche Regeln</u> (English: Employers' liability insurance association rules)

CAS <u>Chemical Abstracts Service</u>

BS British Standards

CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures

[DE] National German regulations

DGUV <u>D</u>eutsche <u>G</u>esetzliche <u>U</u>nfall<u>v</u>ersicherung (English: German statutory accident insurance)

EC European Community

EEC <u>European Economic Community</u>

EN European Standard
EU European Union

EWC <u>European Waste Catalogue</u>

GHS <u>G</u>lobally <u>H</u>armonized <u>S</u>ystem of Classification, Labelling and Packaging of Chemicals

GMBI <u>G</u>emeinsames <u>M</u>inisterial<u>bl</u>att (English: Joint Ministerial Gazette)

IATA-DGR International Air Transport Association - Dangerous Goods Regulations

according to Regulation (EC) No 1907/2006

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IBC-Code International Code for the Construction and Equipment of Ships carrying Dangerous

Chemicals in Bulk

ICAO-TI Technical Instructions For The Safe Transport of Dangerous Goods by Air

IMDG-Code International Maritime Code for Dangerous Goods

LC₅₀ Median lethal concentration

LD₅₀ Median lethal dose

LGK <u>Lagerklasse</u> (English: Storage class)

MARPOL International Convention for the Prevention of Marine Pollution from Ships

OECD Organization for Economic Co-operation and Development

PBT Persistent, bioaccumulative and toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID <u>Règlement concernant le transport International ferroviaire de marchandises Dangereuses</u>

(Regulations Concerning the International Carriage of Dangerous Goods by Rail)

TRGS Technische Regeln für Gefahrstoffe (English: Technical Rules for Hazardous Substances)

UN <u>U</u>nited <u>N</u>ations

UTC Coordinated Universal Time (French: Temps Universel Coordonné)

vPvB Very persistent and very bioaccumulative

16.5. Key literature references and sources for data

- Regulation (EC) No 1907/2006 (REACH), Annex II
- European Chemicals Agency (ECHA) Guidance on the compilation of safety data sheets; Version 2.1 (February 2014); http://echa.europa.eu/documents/10162/13643/sds_en.pdf
- GISBAU (Hazardous substances information system of the BG BAU) course "safety data sheet"; http://www.bgbau.de/gisbau/SDB/lehrgang/lehrgang.htm
- Regulation (EC) No 1272/2008 (CLP regulation)
- European Chemicals Agency (ECHA) Guidance on Labelling and Packaging in accordance with Regulation (EC) No 1272/2008 (04/2011);
 - http://echa.europa.eu/documents/10162/13562/clp labelling en.pdf
- European Chemicals Agency (ECHA), Registered substances;
 http://echa.europa.eu/information-on-chemicals/registered-substances
- European Chemicals Agency (ECHA), C&L Classification and Labelling Inventory;
 http://echa.europa.eu/information-on-chemicals/cl-inventory-database
- Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA):
 GESTIS database on hazardous substances and GESTIS International limit values for chemical agents;
 http://www.dguv.de/dguv/ifa/index.jsp
- German Environmental Agency (Umweltbundesamt), Section IV 2.4: Office of Documentation and Information on Substances Hazardous to Waters RIGOLETTO (catalogue of Substances Hazardous to Waters); http://webrigoletto.uba.de/rigoletto

16.6. Training advice

Provide adequate information, instructions and training for users.

16.7. Indication of changes

A backslash in the left hand margin indicates an amendment from the previous version.

The information given in the safety data sheet only apply to the described product in connection with its intended use. These information are based on the latest state of our knowledge at the time of revision. In particular, they describe our product under the aspect of its hazards and safety measures to be taken. They do not constitute any guarantee of product properties and quality features.