

Trade name: **Bilpron**

Issue/Revision: 14.06.2023

1.1. Product identifier Trade name: Bilpron UFI: not applicable 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses: Cleaning and disinfecting agent Intended purpose: Solution ready for use for the decontamination and prevention of biofilm formation in procedural water lines of medical and dental units. None at intended use. Uses advised against: The product is intended for professional users. Note: 1.3. Details of the supplier of the safety data sheet Manufacturer/Supplier: ALPRO MEDICAL GMBH Mooswiesenstraße 9 D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 E-Mail: info@alpro-medical.de Internet: www.alpro-medical.de E-mail address for the competent person responsible for the safety data sheet: doku@alpro-medical.de 1.4. Emergency telephone number +49 7725 9392-0 In-house emergency telephone number: 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 National Poisons Information Service (UK): +44 344 892 0111 National Poisons Information Service (NPIS) (24 h / 7 d), Medical Professionals Only

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

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].

2.2. Label elements

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

The mixture does not require labelling in the sense of Regulation (EC) No 1272/2008 [CLP].

Hazard pictograms:

Signal word:



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Hazard components for labelling: H-phrases: P-phrases:

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 (see SECTION 12.5.)

The substances in the mixture have no endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Annex XIV (see SECTION 11 and SECTION 12.6.). They are not on the list of substances of very high concern for authorization according to Regulation (EC) No. 1907/2006, Article 59, Paragraph 10).

No further hazards known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Chemical characterisation:

Mixture of propylene glycol, parabens, biguanides and complexing agents in aqueous solution.

Hazardous ingredients

Does not contain hazardous ingredients above concentration limit values fixed in Regulation (EC) No 1907/2006.

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:	No special measures necessary.
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.

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

The product contains a source of phenylalanine.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:	Water spray jet, alcohol resistant foam, extinguishing powder, carbon dioxide (CO ₂)
Unsuitable extinguishing media:	Full water jet

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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon monoxide (CO), carbon dioxide (CO₂)

5.3. Advice for firefighters

Further information:

Special protective equipment:

Not necessary

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.

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 liquidbinding 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

Precautions

Not necessary

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 medicines, food, feed, cosmetics and stimulants.

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: Do not store above 30°C.



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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

- [DE] TRGS 525 Hazardous substances in medical care facilities (Section 7 Activities with disinfectants); Issue: September 2014; Source: GMBI 2014 page 1294-1307 of 13.10.2014 [No 63]; 10.07.2015 [No 27]; www.baua.de
- [DE] DGUV rules 207-206 Prevention of chemical risks when handling disinfectants in health service, Issue: 2016.12; Source: www.dguv.de/publikationen

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Does not contain substances above concentration limits fixing an occupational exposure limit.

Biological limit values

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

Information on monitoring procedures

BS EN 482:2021-04; Title: Workplace exposure - Procedures for the determination of the concentration of chemical agents; British version of EN 482:2021

BS EN 689:2018; 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 689:2018

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)

CEN/TR 17055:2017; Title: Workplace exposure. Measurement of chemical agents complying with the requirements given in EN 482 and either one of EN 838, EN 1076, EN 13205, EN 13890 and EN 13936. Choice of procedures

ISO TR 14294:2011; Title: Workplace atmospheres. Measurement of dermal Exposure. Principles and methods

8.2. Exposure controls

Appropriate engineering controls

Technical and organisational protective measures

No special protective measures necessary.

Personal protective equipment

Eye/face protection:	Not necessary when used as intended.
Skin protection:	
Hand protection:	Not necessary when used as intended.
Other skin protection:	Not necessary when used as intended.
Respiratory protection:	Not necessary when used as intended.
Thermal hazards:	No special protective measures necessary.

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Environmental exposure controls

Not necessary

SECTION 9: Physical and chemical properties

Appearance/physical state:	clear, blue liquid	
Odour:	apple	
Odour threshold:	no data available	
Melting point/freezing point:	no data available	
Initial boiling point and boiling range:	no data available	
Flammability:	not applicable	
Lower explosive limit:	not applicable	
Upper explosive limit:	not applicable	
Flash point:	not applicable	
Auto-ignition temperature:	no data available	
pH (undiluted):	5.5 – 6.5	(20 °C)
Kinematic viscosity:	no data available	
Solubility in water:	completely soluble	
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure:	no data available	(°C)
Density:	0.995 – 1.005 g/cm ³	(20 °C)
Relative vapour density:	no data available	
Particle characteristics:	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosive substances/mixtures and products containing explosives:	not applicable
Flammable gases:	not applicable
Aerosols:	not applicable
Oxidising gases:	not applicable
Gases under pressure:	not applicable
Flammable liquids:	not applicable
Flammable solids:	not applicable
Self-reactive substances and mixtures:	not applicable
Pyrophoric liquids:	not applicable
Pyrophoric solids:	not applicable
Self-heating substances and mixtures:	not applicable



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Substances and mixtures, which emit flammable gases in contact with water:	not applicable
Oxidising liquids:	not applicable
Oxidising solids:	not applicable
Organic peroxides:	not applicable
Substances and mixtures corrosive to metals:	not applicable
Desensitised explosives:	not applicable
9.2.2. Other safety characteristics	

Electrical conductivity (undiluted):	920-1020 μS/cm	(20 °C)
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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 mg/kg => no classification
Acute toxicity - dermal:	Acute Toxicity Estimate ATE _{mix} > 2000 mg/kg => no classification
Acute toxicity - inhalation:	Acute Toxicity Estimate ATE _{mix} > 20 mg/l => no classification

Skin corrosion/irritation

Product

No classification. [calculation method]

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Serious eye damage/irritation

Product

No classification. [calculation method]

Respiratory or skin sensitisation

Product

No classification. [calculation method]

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]

STOT-repeated exposure

Product

No data available.

Aspiration hazard

Product

No data available.

Information on other hazards

Endocrine disrupting properties:

No substances are contained that have endocrine disrupting properties for humans.

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.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

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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. Endocrine disrupting properties

No substances are contained that have endocrine disrupting properties for non-target organisms.

12.7. 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

14.6. Special precautions for user



14.7. Maritime transport in bulk according to IMO instruments

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 2019/1021 on persistent organic pollutants

not applicable

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

not applicable

REGULATION (EU) No 648/2004 on detergents

Disinfectants Perfumes

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)

VOC content: < 2 %

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

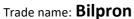
not applicable

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.



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SECTION 16: Other information

16.1. Full text of hazard classes and H-phrases

Hazard classes

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H-phrases (Hazard statements)

16.2. Abbreviations and acronyms

	ADN	<u>A</u> ccord européen relatif au transport international des marchandises <u>d</u> angereuses par voie de <u>n</u> avigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
	ADR	<u>A</u> ccord européen relatif au transport international des marchandises <u>d</u> angereuses par <u>r</u> oute (European Agreement concerning the International Carriage of Dangerous Goods by Road)
	BS	British Standards
	CAS	<u>C</u> hemical <u>A</u> bstracts <u>S</u> ervice
	CLP	Regulation on <u>Classification</u> , <u>Labelling</u> and <u>Packaging</u> of Substances and Mixtures
	[DE]	National German regulations
	DGUV	Deutsche Gesetzliche Unfallversicherung (English: German statutory accident insurance)
	EC	<u>E</u> uropean <u>C</u> ommunity
	EEC	<u>E</u> uropean <u>E</u> conomic <u>C</u> ommunity
	EN	European Standard
	EU	<u>E</u> uropean <u>U</u> nion
	EWC	<u>E</u> uropean <u>W</u> aste <u>C</u> atalogue
	GMBI	<u>G</u> emeinsames <u>M</u> inisterial <u>bl</u> att (English: Joint Ministerial Gazette)
	IATA-DGR	International <u>Air Transport Association - Dangerous G</u> oods <u>R</u> egulations
	ICAO-TI	Technical Instructions For The Safe Transport of Dangerous Goods by Air
	IMDG-Code	International <u>M</u> aritime Code for <u>D</u> angerous <u>G</u> oods
	LC50	Median lethal concentration
	LD ₅₀	Median lethal dose
	LGK	Lagerklasse (English: Storage class)
	OECD	Organization for Economic Co-operation and Development
	PBT	Persistent, <u>b</u> ioaccumulative and <u>t</u> oxic
	ppm	<u>P</u> arts <u>p</u> er <u>m</u> illion
	REACH	<u>Registration, Evaluation, Authorisation and Restriction of Chemicals</u>
	RID	<u>R</u> èglement concernant le transport <u>International ferroviaire de marchandises</u> <u>D</u> angereuses
		(Regulations Concerning the International Carriage of Dangerous Goods by Rail)
	TRGS	<u>T</u> echnische <u>R</u> egeln für <u>G</u> efahrstoffe (English: Technical Rules for Hazardous Substances)
		<u>U</u> nited <u>N</u> ations
	UTC	Coordinated Universal Time (French: Temps Universel Coordonné)
	VOC	Volatile Organic Compounds
	vPvB	<u>V</u> ery <u>p</u> ersistent and <u>v</u> ery <u>b</u> ioaccumulative
16.3	.Key literatu	re references and sources for data
	- Regulat	tion (EC) No 1907/2006 (REACH), Annex II
	F	

- European Chemicals Agency (ECHA) Guidance on the compilation of safety data sheets; Version 4.0 (December 2022); https://echa.europa.eu/documents
- Regulation (EC) No 1272/2008 (CLP regulation)



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- European Chemicals Agency (ECHA) Guidance on Labelling and Packaging in accordance with Regulation (EC) No 1272/2008; Version 4.2 (03/2021); https://echa.europa.eu/documents
- European Chemicals Agency (ECHA), Registered substances;
- https://echa.europa.eu/information-on-chemicals/registered-substances
 European Chemicals Agency (ECHA), C&L Classification and Labelling Inventory;
- https://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;
 https://www.dguv.de/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); https://webrigoletto.uba.de/rigoletto

16.4. Methods according to Article 9 of Regulation (EC) No 1272/2008 for the evaluation of information for classification purposes

Calculation method according to the criteria in Annex I 1272/2008. Flash point according to EN ISO 2719:2002. pH value measurement. Material compatibility and corrosiveness in practical tests

16.5. Training advice

Provide adequate information, instructions and training for users.

16.6. Indication of changes

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

The information given in the safety data sheet only applies to the described product in connection with its intended use. This information is based on the latest state of our knowledge at the time of revision. In particular, it describes our product under the aspect of its hazards and safety measures to be taken. It does not constitute any guarantee of product properties and quality features.



Trade name: **BRS® Activator** Issue/Revision: 28.02.2023 Print date: 01.03.2023

Version: 2.1 Replaces version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier **BRS®** Activator Trade name: 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses: **Cleaning agent** Intended purpose: Cleaning solution for the main cleaning of the procedural water lines of dental 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 Manufacturer/Supplier: ALPRO MEDICAL GMBH Mooswiesenstraße 9 D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 E-mail: info@alpro-medical.de Internet: www.alpro-medical.com 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 Monday – Friday from 08:00 am to 04:30 pm (UTC+1); for chemical information and legal information on hazardous substances only +49 761 19240 Poison centre: 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].

2.2. Label elements

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

The mixture does not require labelling in the sense of Regulation (EC) No 1272/2008 [CLP].

Hazard pictograms: Signal word: Hazard components for labelling: H-phrases: -P-phrases: -



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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 surfactants with non-hazardous additions in aqueous solution.

Hazardous ingredients

Does not contain hazardous ingredients above concentration limit values fixed in Regulation (EC) No 1907/2006.

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:	No special measures necessary.
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 only a few sips of water (foaming product). Do not induce vomiting (risk of aspiration).

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

None known.

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 (CO ₂)

Unsuitable extinguishing media: Full v

Full water jet

5.2. Special hazards arising from the substance or mixture

	Hazardous combustion products:	Carbon monoxide (CO), carbon dioxide (CO ₂)
5.3.	Advice for firefighters	
	Special protective equipment:	Not necessary
	Further information:	Cool endangered containers with water spray jet.



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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.

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 liquidbinding 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

Precautions

Not necessary

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 necessaryFurther information on storage conditions:Not necessaryStorage 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.



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Industry and sector specific guidance

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

Does not contain substances above concentration limits fixing an occupational exposure limit.

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

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:	Not necessary when used as intended.
Skin protection:	
Hand protection:	Not necessary when used as intended.
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, light green liquid
Odour:	of tenside

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	Odour threshold:	no data available	
	pH (undiluted):	8.5 – 9.5	(20 °C)
	Melting point/freezing point:	no data available	
	Initial boiling point and boiling range:	no data available	
	Flash point:	not applicable	
	Evaporation rate:	no data available	
	Flammability (solid, gas):	not applicable	
	Lower explosive limit:	not applicable	
	Upper explosive limit:	not applicable	
	Vapour pressure:	no data available	(°C)
	Vapour density:	no data available	
	Relative density:	0.990 – 1.000	(20 °C)
	Solubility in water:	completely soluble	
	Partition coefficient: n-octanol/water	not applicable	
	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:	1.3358 – 1.3366	(°C)
	Electrical conductivity (undiluted):	3000 – 4000 μS/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.



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Version: 2.1 Replaces version: 2.0

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Product Acute toxicity - oral: Acute Toxicity Estimate ATE_{mix} > 2000 mg/kg => no classification Acute toxicity - dermal: Acute Toxicity Estimate ATE_{mix} > 2000 mg/kg => no classification Acute toxicity - inhalation: Acute Toxicity Estimate ATE_{mix} > 20 mg/l => no classification Skin corrosion/irritation Product No data available. Serious eye damage/irritation Product No data available. **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 data available. **STOT-repeated exposure** Product No data available. Aspiration hazard Product

No data available.



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SECTION 12: Ecological information

12.1. Toxicity

No data available.

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.

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

-



Trade name: **BRS®** Activator Issue/Revision: 28.02.2023

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14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

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14.5. Environmental hazards

14.6. Special precautions for user

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



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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. Full text of hazard classes H-phrases

Hazard classes

_

H-phrases (Hazard statements)

16.2. Abbreviations and acronyms

ADN	Accord européen relatif au transport international des marchandises dangereuses par voie de
	navigation intérieure (European Agreement concerning the International Carriage of
	Dangerous Goods by Inland Waterways)
ADR	<u>A</u> ccord européen relatif au transport international des marchandises <u>d</u> angereuses par <u>r</u> oute
	(European Agreement concerning the International Carriage of Dangerous Goods by Road)
BGR	<u>Berufsgenossenschaftliche Regeln (English: Employers' liability insurance association rules)</u>
BS	<u>B</u> ritish <u>S</u> tandards
CLP	Regulation on <u>Classification</u> , <u>Labelling</u> and <u>Packaging</u> of Substances and Mixtures
[DE]	National German regulations
DGUV	<u>D</u> eutsche <u>G</u> esetzliche <u>U</u> nfallversicherung (English: German statutory accident insurance)
EC	<u>E</u> uropean <u>C</u> ommunity
EEC	<u>E</u> uropean <u>E</u> conomic <u>C</u> ommunity
EN	European Standard
EU	<u>E</u> uropean <u>U</u> nion
EWC	<u>E</u> uropean <u>W</u> aste <u>C</u> atalogue
GHS	Globally Harmonized System 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 <u>Air Transport Association - Dangerous G</u> oods <u>Regulations</u>
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 <u>M</u> aritime Code for <u>D</u> angerous <u>G</u> oods
LGK	Lagerklasse (English: Storage class)
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
OECD	Organization for Economic Co-operation and Development
PBT	<u>P</u> ersistent, <u>b</u> ioaccumulative and <u>t</u> oxic
REACH	<u>Registration, Evaluation, Authorisation and Restriction of Chemicals</u>
RID	<u>R</u> èglement concernant le transport <u>International ferroviaire de marchandises D</u> angereuses
	(Regulations Concerning the International Carriage of Dangerous Goods by Rail)
TRGS	<u>T</u> echnische <u>R</u> egeln für <u>G</u> efahr <u>s</u> toffe (English: Technical Rules for Hazardous Substances)
UN	<u>U</u> nited <u>N</u> ations
UTC	Coordinated Universal Time (French: Temps Universel Coordonné)
vPvB	<u>V</u> ery <u>p</u> ersistent and <u>v</u> ery <u>b</u> ioaccumulative



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16.3. 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); <u>http://echa.europa.eu/documents/10162/13643/sds_en.pdf</u>
- GISBAU (Hazardous substances information system of the BG BAU) course "safety data sheet"; <u>http://www.bgbau.de/gisbau/SDB/lehrgang/lehrgang.htm</u>
- 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; <u>http://echa.europa.eu/information-on-chemicals/registered-substances</u>
- European Chemicals Agency (ECHA), C&L Classification and Labelling Inventory; <u>http://echa.europa.eu/information-on-chemicals/cl-inventory-database</u>
- 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); <u>http://webrigoletto.uba.de/rigoletto</u>

16.4. Training advice

Provide adequate information, instructions and training for users.

16.5. Indication of changes

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

The information given in the safety data sheet only applies to the described product in connection with its intended use. This information is based on the latest state of our knowledge at the time of revision. In particular, it describes our product under the aspect of its hazards and safety measures to be taken. It does not constitute any guarantee of product properties and quality features.



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Version: 3.0 Replaces version: 2.1

1.1. Product identifier Trade name: **BRS®** PreCleaner UFI: Q5TN-5263-800C-0X75 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses: Cleaning agent, enzymatic Intended purpose: Cleaning powder for the precleaning of the procedural water lines of dental 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 Manufacturer/Supplier: ALPRO MEDICAL GMBH Mooswiesenstraße 9 D-78112 St. Georgen Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 E-mail: info@alpro-medical.de Internet: www.alpro-medical.de 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 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 National Poisons Information Centre (UK): +44 344 892 0111 National Poisons Information Service (NPIS) (24 h / 7 d), Medical Professionals Only

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Classification	Classification procedure
Skin Corr. 1B; H314	Calculation method

Full text of hazard classes as well as H-phrases: see under SECTION 16.1.

2.2. Label elements

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

Hazard pictograms:



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Signal word:		Danger
Hazard compo for labelling:	onents	Disodium metasilicate (6834-92-0)
H- phrases:	H314	Causes severe skin burns and eye damage.
P- phrases:		Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.

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 (see SECTION 12.5.).

The substances in the mixture do not have any endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Annex XIV (see Section 11 and Section 12.6.). They are not on the list of substances of very high concern for authorization according to Regulation (EC) No. 1907/2006, Article 59, Paragraph 10).

No further hazards known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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

Gefährliche Inhaltsstoffe

Chemical name	Identification numbers	Classification in accordance with Regulation (EC) No 1272/2008	Weight %
Sodium carbonate	CAS No: 497-19-8 EC No: 207-838-8 Index No: 011-005-00-2 REACH Registration No: 01-2119485498-19-XXXX	Eye Irrit. 2; H319	≥ 50
Dinatriummetasilikat	CAS No: 6834-92-0 EC No: 229-912-9 Index No 014-010-00-8 REACH Registration No: 01-2119449811-37-XXXX	Skin Corr. 1B; H314 STOT SE 3; H335	≥ 15 - < 20

Full text of hazard classes and H-phrases: see SECTION 16.1. Occupational exposure limits: see SECTION 8.1



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SECTION 4: First aid measures

4.1. Description of first aid measures

General information:	First aider: Pay attention to self-protection! Remove contaminated, saturated clothing immediately.
Following inhalation:	Move affected person into fresh air and keep still and warm. Seek medical advice.
Following skin contact:	Wash skin immediately with plenty of water and soap. In case of skin reactions, consult a physician.
Following eye contact:	Flush eyes immediately with flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Consult an ophthalmologist.
Following ingestion:	Rinse mouth with water. Let drink plenty of water. Do not induce vomiting (risk of perforation). Consult a physician immediately.

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

Causes severe skin burns and eye damage.

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 (CO ₂)
	Unsuitable extinguishing media:	Full water jet
5.2.	Special hazards arising from the subs	stance or mixture
	Hazardous combustion products:	Carbon monoxide (CO), carbon dioxide (CO ₂)
5.3.	Advice for firefighters	
	Special protective equipment:	Wear self-contained breathing apparatus.
	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. Do not breathe dust. Avoid formation of dust. Provide adequate ventilation. Evacuate danger area. Observe emergency plans. Consult experts.

For emergency responders

Use personal protective equipment. See SECTION 8.2.

6.2. Environmental precautions

Do not discharge into drains or surface and ground water.

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6.3. Methods and material for containment and cleaning up

Containment

For large spills, cover spilled material with a plastic cover in order to prevent spreading and to keep the powder dry.

Cleaning up

Take up mechanically. Avoid formation of dust. Collect in suitable, closed containers for disposal. Clean contaminated surfaces thoroughly.

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

Precautions

Avoid contact with skin and eyes. Avoid formation of dust. Keep container tightly closed.

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 medicines, food, feed, cosmetics and stimulants.

7.2. Conditions for safe storage, including any incompatibilities

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

Advice on common storage: Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions: Keep away from sunlight.

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

- [DE] TRGS 525 Hazardous substances in medical care facilities (Section 7 Activities with disinfectants); Issue: September 2014; Source: GMBI 2014 page 1294-1307 of 13.10.2014 [No 63]; 10.07.2015 [No 27]; www.baua.de.
- [DE] DGUV rules 207-206 Prevention of chemical risks when handling disinfectants in health service, Issue: 2016.12; Source: www.dguv.de/publikationen

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Does not contain substances above concentration limits fixing an occupational exposure limit.



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Biological limit values

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

Angaben über Überwachungsverfahren

BS EN 482:2021-04; Title: Workplace exposure - Procedures for the determination of the concentration of chemical agents; British version of EN 482:2021

BS EN 689:2018; 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 689:2018

CEN/TR 17055:2017; Title: Workplace exposure. Measurement of chemical agents complying with the requirements given in EN 482 and either one of EN 838, EN 1076, EN 13205, EN 13890 and EN 13936. Choice of procedures

ISO TR 14294:2011; Title: Workplace atmospheres. Measurement of dermal Exposure. Principles and methods

8.2. Exposure controls

Appropriate engineering controls

Technical and organisational protective measures

The eyewash station (or eyewash bottle) and emergency shower must be located near the workplace.

Personal protective equipment

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

Skin protection:

Hand protection:	Protective gloves according to BS EN ISO 374-1 and BS EN 21420 <u>Splash guard:</u> Protective gloves: type C; permeation-resistant at least 10 minutes <u>Permanent contact (> 480 min):</u> Protective gloves: type A or B; code letters: I, K; permeation-resistant at least 30 minutes
Other skin protection:	Long-sleeved protective clothing (lab coat)
Respiratory protection:	Not necessary when used as intended.
Thermal hazards:	No special protective measures necessary.
Environmental exposure controls	

Do not discharge into drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance/physical state:	reddish, granular powder
Odour:	characteristic
Odour threshold:	no data available
Melting point/freezing point:	no data available
Initial boiling point and boiling range:	no data available
Flammability:	no data available

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Lower explosive limit:	not applicable	
Upper explosive limit:	not applicable	
Flash point:	not applicable	
Auto-ignition temperature:	no data available	
рН (5 g/l H ₂ O):	11.5 – 12.5	(20 °C)
Kinematic viscosity:	no data available	
Solubility in water:	completely soluble	
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure:	not applicable	
Density:	no data available	(°C)
Relative vapour density:	not applicable	
Particle characteristics:	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosive substances/mixtures and products containing		
explosives:	not applicable	
Flammable gases:	not applicable	
Aerosols:	not applicable	
Oxidising gases:	not applicable	
Gases under pressure:	not applicable	
Flammable liquids:	not applicable	
Flammable solids:	not applicable	
Self-reactive substances and mixtures:	not applicable	
Pyrophoric liquids:	not applicable	
Pyrophoric solids:	not applicable	
Self-heating substances and mixtures:	not applicable	
Substances and mixtures, which emit flammable gases		
in contact with water:	not applicable	
Oxidising liquids:	not applicable	
Oxidising solids:	not applicable	
Organic peroxides:	not applicable	
Substances and mixtures corrosive to metals:	not applicable	
Desensitised explosives:	not applicable	

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9.2.2. Other safety characteristics

Electrical conductivity (5 g/l H_2O): 5500 - 7500 μ S/cm

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

No incompatible materials known when used as intended.

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 mg/kg => no classification
Acute toxicity - dermal:	Acute Toxicity Estimate ATE _{mix} > 2000 mg/kg => no classification
Acute toxicity - inhalation:	Acute Toxicity Estimate ATE _{mix} > 20 mg/l => no classification

Ingredients

Disodium metasilicate (CAS No: 6834-92-0):Acute toxicity - oral:LD50: 1152 mg/kg; species: rat; ECHA: oral.001

Skin corrosion/irritation

Product

Causes severe skin burns. [calculation method]

Serious eye damage/irritation

Product

Causes serious eye damage. [calculation method]

Respiratory or skin sensitisation

Product

No classification. [calculation method]



(20 °C)

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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

Disodium metasilicate (CAS No: 6834-92-0): May cause respiratory irritation.

STOT-repeated exposure

Product

No data available.

Aspiration hazard

Product

No data available.

Information on other hazards

Endocrine disrupting properties:

No substances are contained that have endocrine disrupting properties for humans.

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 organic ingredients. Sodium carbonate and disodium metasilicate as inorganic substances are not subject to

biodegradation.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

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12.5. Ergebnisse der PBT- und vPvB-Beurteilung

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

12.6. Endocrine disrupting properties

No substances are contained that have endocrine disrupting properties for non-target organisms.

12.7. 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 hazardous waste in compliance with the Directive 2008/98/EC on waste as well as national and regional regulations. Do not dispose of via the waste water. Leave product in the original container as possible. Do not mix with other waste materials.

Waste codes / waste designations according to EWC

Product residues: 07 06 99* wastes not otherwise specified

Disposal of the packaging

Packaging contaminated with product is considered as hazardous waste and must be disposed of accordingly.

Waste codes / waste designations according to EWC

Contaminated packaging: 15 01 10* packaging containing residues of or contaminated by hazardous substances

Recommendation

Contaminated packaging must be emptied optimally and can be recycled after appropriate cleaning (rinse with water).

From a dilution to 0.05 % the concentrate is no longer classified as a hazardous substance.

SECTION 14: Transport information

14.0. Transport classification

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

UN 3253

14.2. UN proper shipping name

ADR/RID/ADN

DISODIUM TRIOXOSILICATE

IMDG-Code/ICAO-TI/IATA-DGR

DISODIUM TRIOXOSILICATE

14.3. Transport hazard class(es)

Class:	8
Subsidiary risk(s):	-

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14.4. Packing group	
III	
14.5. Environmental hazards	
ADR/RID/ADN	
Environmentally Hazardous:	No
IMDG-Code	
Marine Pollutant:	No
14.6. Special precautions for user	
Not necessary.	
14.7. Maritime transport in bulk according to IMO instrum	ents
Not applicable for product as supplied.	
14.8. Further information	
Transport category according to ADR section 1.1.3.6:	3
Maximum total quantity per transport unit according to ADR section 1.1.3.6:	1000 kg
Limited quantity (Maximum quantity per inner packaging) according to ADR/RID/ADN/IMDG-Code:	5 kg
Classification code according to ADR/RID/ADN:	C6
Hazard identification number according to ADR/RID:	80
Tunnel restriction code according to ADR/RID:	E
Segregation group according to IMDG-Code section 5.4.1.5.11.1:	IMDG-Code- Segregation group 18 – alkalis
EmS-Codes:	F-A, S-B

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 2019/1021 on persistent organic pollutants

not applicable

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

not applicable

REGULATION (EU) No 648/2004 on detergents

Enzymes: < 5 % Phosphates: < 5 %

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

Trade name: BRS® PreCleaner

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ALPRO MEDICAL GMBH

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

Observe employment restrictions for juveniles.

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. Full text of hazard classes and H-phrases

Hazard classes

Eye Irrit.	Eye irritation
Skin Corr.	Skin corrosion
STOT SE	Specific target organ toxicity (single exposure)

H- phrases (Hazard statements)

- H314 Causes severe skin burns and eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

16.2. Abbreviations and acronyms

ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) ADR Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) BS British Standards CAS Chemical Abstracts Service CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures [DE] National German regulations DGUV Deutsche Gesetzliche Unfallversicherung (English: German statutory accident insurance) EC European Community EEC European Economic Community ΕN European Standard EU European Union EWC European Waste Catalogue

GMBI <u>Gemeinsames Ministerialblatt</u> (English: Joint Ministerial Gazette)

IATA-DGR International <u>Air Transport Association - Dangerous Goods Regulations</u>



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Version: 3.0 Replaces version: 2.1

ICAO-TI	Technical Instructions For The Safe Transport of Dangerous Goods by Air
IMDG-Co	ode <u>I</u> nternational <u>M</u> aritime Code for <u>D</u> angerous <u>G</u> oods
LD ₅₀	Median lethal dose
OECD	<u>Organization for Economic Co-operation and Development</u>
PBT	<u>P</u> ersistent, <u>b</u> ioaccumulative and <u>t</u> oxic
ppm	<u>P</u> arts <u>p</u> er <u>m</u> illion
REACH	<u>Registration, Evaluation, Authorisation and Restriction of Ch</u> emicals
RID	<u>Règlement concernant le transport International ferroviaire de marchandises Dangereuses</u>
	(Regulations Concerning the International Carriage of Dangerous Goods by Rail)
TRGS	<u>T</u> echnische <u>R</u> egeln für <u>G</u> efahr <u>s</u> toffe (English: Technical Rules for Hazardous Substances)
UN	<u>U</u> nited <u>N</u> ations
UTC	Coordinated Universal Time (French: Temps Universel Coordonné)

vPvB <u>Very persistent and very b</u>ioaccumulative

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16.3. 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 4.0 (December 2022); https://echa.europa.eu/documents
- Regulation (EC) No 1272/2008 (CLP regulation)
- European Chemicals Agency (ECHA) Guidance on Labelling and Packaging in accordance with Regulation (EC) No 1272/2008; Version 4.2 (03/2021); https://echa.europa.eu/documents
- European Chemicals Agency (ECHA), Registered substances; https://echa.europa.eu/information-on-chemicals/registered-substances
- European Chemicals Agency (ECHA), C&L Classification and Labelling Inventory; https://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; https://www.dguv.de/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); https://webrigoletto.uba.de/rigoletto

16.4. Methods according to Article 9 of Regulation (EC) No 1272/2008 for the evaluation of information for classification purposes

Calculation method according to the criteria in Annex I 1272/2008. Flash point according to EN ISO 2719:2002. pH value measurement. Material compatibility and corrosiveness in practical tests.

16.5. Training advice

Provide adequate information, instructions and training for users.

16.6. Indication of changes

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

The information given in the safety data sheet only applies to the described product in connection with its intended use. This information is based on the latest state of our knowledge at the time of revision. In particular, it describes our product under the aspect of its hazards and safety measures to be taken. It does not constitute any guarantee of product properties and quality features.



Trade name: BRS® Remover

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1.1. Product identifier Trade name: **BRS® Remover** UFI: KJWU-PK01-000P-TTGX 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses: Cleaning agent Intended purpose: Cleaning powder for the main cleaning of the procedural water lines of dental 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 Manufacturer/Supplier: ALPRO MEDICAL GMBH Mooswiesenstraße 9 D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 E-mail: info@alpro-medical.de Internet: www.alpro-medical.de 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 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 National Poisons Information Centre (UK): +44 344 892 0111 National Poisons Information Service (NPIS) (24 h / 7 d), Medical Professionals Only

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method

Full text of hazard classes as well as H-phrases: see under SECTION 16.1.

2.2. Label elements

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

Hazard pictograms:





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Signal word:		Warning
Hazard compo for labelling:	nents	-
H-phrases:	H319	Causes serious eye irritation.
P-phrases:		Wear eye protection/face protection. 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.

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 (see SECTION 12.5.).

The substances in the mixture do not have any endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Annex XIV (see Section 11 and Section 12.6.). They are not on the list of substances of very high concern for authorization according to Regulation (EC) No. 1907/2006, Article 59, Paragraph 10).

No further hazards known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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

Hazardous ingredients

Chemical name	-	Classification in accordance with Regulation (EC) No 1272/2008	Weight %
	CAS No: 77-92-9 EC No: 201-069-1 REACH Registration No: 01-2119457026-42-XXXX	Eye Irrit. 2; H319	≥ 50

Full text of hazard classes and H-phrases: see SECTION 16.1. Occupational exposure limits: see SECTION 8.1

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:	First aider: Pay attention to self-protection!
Following inhalation:	Move affected person into fresh air and keep still and warm. In case of continued complaints seek medical advice.
Following skin contact:	Wash skin immediately with plenty of water and soap. In case of skin reactions, consult a physician.
Following eye contact:	Flush eyes immediately with flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Consult an ophthalmologist.
Following ingestion:	Rinse mouth with water. Let drink plenty of water. Do not induce vomiting. Consult a physician immediately.

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

Causes serious eye irritation.

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:	Carbon monoxide (CO), carbon dioxide (CO2)
5.3.	Advice for firefighters	
	Special protective equipment:	Wear self-contained breathing apparatus.
	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. Do not breathe dust. Avoid formation of dust. Provide adequate ventilation.

For emergency responders

Use personal protective equipment. See SECTION 8.2.

6.2. Environmental precautions

Do not discharge into drains or surface and ground water.

6.3. Methods and material for containment and cleaning up

Containment

For large spills, cover spilled material with a plastic cover in order to prevent spreading and to keep the powder dry.

Cleaning up

Take up mechanically. Avoid formation of dust. Collect in suitable, closed containers for disposal. Clean contaminated surfaces thoroughly.

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.



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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions

Avoid contact with skin and eyes. Avoid formation of dust. Keep container tightly closed. Do not mix with cleaners containing chlorine.

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 medicines, food, feed, cosmetics and stimulants.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:Keep only in the original container. Keep container tightly
closed.Advice on common storage:Not necessaryFurther information on storage conditions:Keep away from sunlight.

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

- [DE] TRGS 525 Hazardous substances in medical care facilities (Section 7 Activities with disinfectants); Issue: September 2014; Source: GMBI 2014 page 1294-1307 of 13.10.2014 [No 63]; 10.07.2015 [No 27]; www.baua.de.
- [DE] DGUV rules 207-206 Prevention of chemical risks when handling disinfectants in health service, Issue: 2016.12; 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		
Citric acid (CAS-Nr.: 77-92-9)						
EU						no limit value specified
UK						no limit value specified

Used abbreviations, symbols, numerals and explanations

Biological limit values

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

Information on monitoring procedures

BS EN 482:2021-04; Title: Workplace exposure - Procedures for the determination of the concentration of chemical agents; British version of EN 482:2021



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BS EN 689:2018; 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 689:2018

CEN/TR 17055:2017; Title: Workplace exposure. Measurement of chemical agents complying with the requirements given in EN 482 and either one of EN 838, EN 1076, EN 13205, EN 13890 and EN 13936. Choice of procedures

ISO TR 14294:2011; Title: Workplace atmospheres. Measurement of dermal Exposure. Principles and methods

8.2. Exposure controls

Appropriate engineering controls

Technical and organisational protective measures

The eyewash station (or eyewash bottle) must be located near the workplace.

Personal protective equipment

Eye/face protection:	Safety glasses with side protection according to BS EN 166
Skin protection:	
Hand protection:	Protective gloves according to BS EN ISO 374-1 and BS EN 21420 <u>Splash guard:</u> Protective gloves: type C; permeation-resistant at least 10 minutes <u>Permanent contact (> 480 min):</u> Protective gloves: type A or B; code letters: N; permeation-resistant at least 30 minutes
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	

Do not discharge into drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance/physical state:	light blue powder
Odour:	characteristic
Odour threshold:	no data available
Melting point/freezing point:	no data available
Initial boiling point and boiling range:	no data available
Flammability:	no data available
Lower explosive limit:	not applicable
Upper explosive limit:	not applicable
Flash point:	not applicable
Auto-ignition temperature:	no data available
pH (80 g/l H ₂ O):	1.5 – 2.0

(20 °C)

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Kinematic viscosity:	no data available	
Solubility in water:	completely soluble	
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure:	not applicable	(°C)
Density:	no data available	(20 °C)
Relative vapour density:	not applicable	
Particle characteristics:	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

	Explosive substances/mixtures and products containing explosives:	not applicable
	Flammable gases:	not applicable
	Aerosols:	not applicable
	Oxidising gases:	not applicable
	Gases under pressure:	not applicable
	Flammable liquids:	not applicable
	Flammable solids:	not applicable
	Self-reactive substances and mixtures:	not applicable
	Pyrophoric liquids:	not applicable
	Pyrophoric solids:	not applicable
	Self-heating substances and mixtures:	not applicable
	Substances and mixtures, which emit flammable gases in contact with water:	not applicable
	Oxidising liquids:	not applicable
	Oxidising solids:	not applicable
	Organic peroxides:	not applicable
	Substances and mixtures corrosive to metals:	not applicable
	Desensitised explosives:	not applicable
9.2.2	2. Other safety characteristics	

Electrical conductivity (80 g/l H_2 O): 6000 – 6500 μ S/cm (20 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when handled and stored as intended. Do not mix with cleaners containing chlorine. Chlorine gas may be released.

10.2. Chemical stability

The product is stable when handled and stored as intended.

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10.3. Possibility of hazardous reactions

None known

Do not mix with cleaners containing chlorine. Chlorine gas may be released.

10.4. Conditions to avoid

None known

10.5. Incompatible materials

None known

Do not mix with cleaners containing chlorine. Chlorine gas may be released.

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 mg/kg => no classification
Acute toxicity - dermal:	Acute Toxicity Estimate ATE _{mix} > 2000 mg/kg => no classification
Acute toxicity - inhalation:	Acute Toxicity Estimate ATE _{mix} > 20 mg/l

=> no classification

Skin corrosion/irritation

Product

No data available.

Serious eye damage/irritation

Product

Causes serious eye irritation. [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.

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STOT-single exposure

Product

No data available.

STOT-repeated exposure

Product

No data available.

Aspiration hazard

Product

No data available.

Information on other hazards

Endocrine disrupting properties:

No substances are contained that have endocrine disrupting properties for humans.

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.

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. Endocrine disrupting properties

No substances are contained that have endocrine disrupting properties for non-target organisms.

12.7. 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 hazardous waste in compliance with the Directive 2008/98/EC on waste as well as national and regional regulations. Do not dispose of via the waste water. Leave product in the original container as possible. Do not mix with other waste materials.

Waste codes / waste designations according to EWC

Product residues: 16 03 05* organic wastes containing hazardous substances



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Disposal of the packaging

Packaging contaminated with product is considered as hazardous waste and must be disposed of accordingly.

Waste codes / waste designations according to EWC

Contaminated packaging:

15 01 10* packaging containing residues of or contaminated by hazardous substances

Recommendation

Contaminated packaging must be emptied optimally and can be recycled after appropriate cleaning (rinse with water).

From a dilution to 17 % the concentrate is no longer classified as a hazardous substance.

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
- 14.6. Special precautions for user
- 14.7. Maritime transport in bulk according to IMO instruments

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 2019/1021 on persistent organic pollutants
 - not applicable
- REGULATION (EU) No 649/2012 concerning the export and import of hazardous chemicals not applicable



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REGULATION (EU) No 648/2004 on detergents

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

Hazard classes

H319

Eye Irrit. Eye irritation

H-phrases (Hazard statements)

Causes serious eye irritation.

16.2. Abbreviations and acronyms

ADN Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) Accord européen relatif au transport international des marchandises dangereuses par route ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road) BS British Standards CAS **Chemical Abstracts Service** CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures [DE] National German regulations DGUV Deutsche Gesetzliche Unfallversicherung (English: German statutory accident insurance) EC European Community EEC European Economic Community ΕN European Standard EU European Union EWC European Waste Catalogue



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GMBI IATA-DGR	<u>G</u> emeinsames <u>M</u> inisterial <u>bl</u> att (English: Joint Ministerial Gazette) International <u>A</u> ir <u>T</u> ransport <u>A</u> ssociation - <u>D</u> angerous <u>G</u> oods <u>R</u> egulations
ICAO-TI	Technical Instructions For The Safe Transport of Dangerous Goods by Air
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TRGS	Technische <u>Regeln für Gefahrs</u> toffe (English: Technical Rules for Hazardous Substances)
UN	United Nations
UTC	Coordinated Universal Time (French: Temps Universel Coordonné)
vPvB	Very persistent and very bioaccumulative

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- European Chemicals Agency (ECHA), C&L Classification and Labelling Inventory; https://echa.europa.eu/information-on-chemicals/cl-inventory-database
- Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA):
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