

Trade name: **BC-San 100** Issue/Revision: 08.12.2020 Print date: 10.12.2020

Version: 1.1 Replaces version: 1.0

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

1.1.	Product identifier		
	Trade name:	BC-San 100	
1.2.	Relevant identified uses of the substance or mixture and uses advised against		
	Relevant identified uses:	Disinfecting agent	
	Intended purpose:	Solution for the processing of pressure cylinders (1 - 1.5 L) of stand-alone procedural water supply systems.	
	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 shee	et	
	Supplier:	Biodegree PTY. LTD. 2/359 Alfred Street North Neutral Bay NSW 2089 (Australia) Tel. +61 499145331 Email: info@biodegree.com.au	
	Manufacturer/Supplier:	ALPRO MEDICAL GMBH Mooswiesenstraße 9 D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 E-mail: alpro@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	
	Poison centre:	+49 761 19240 Poisoning information centre, Freiburg, Germany (24 h / 7 d), English is spoken or Poisons Information Centre (Phone Australia 131 126) (24h emergency call)	

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
Skin Irrit. 2; H315	Calculation method
Aquatic Chronic 3; H412	Calculation method

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



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2.2. Label elements

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

Hazard pictograms:

Signal word:

\checkmark	
Warning	

0		5
Hazard compo for labelling:	nents	Sodium hypochlorite solution with 1 - 2 % active chlorine
H-phrases:	H315 H319 H412	Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
P-phrases:	P280 P305+P351+P338 P337+P313	Wear protective gloves/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. 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.

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 in accordance with	Weight %
		Regulation (EC) No 1272/2008	
Sodium hypochlorite	CAS No: 7681-52-9	Met. Corr. 1; H290	≥1-<2
	EC No: 231-668-3	Skin Corr. 1B; H314	
	Index No: 017-011-00-1	STOT SE 3; H335	
	REACH Registration No:	Aquatic Acute 1; H400	
	01-2119488154-34-XXXX	Aquatic Chronic 1; H410	
		EUH031	
		M-Factor acute: 10	
		M-Factor chronic: 1	
		Specific concentration limits	
		EUH031: C ≥ 5 %	
		(further specific concentration limits:	
		see ECHA -> Registered substances)	

Full text of hazard classes, H- and EUH-phrases: see SECTION 16.1.



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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!
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.

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

Causes skin irritation. Causes serious eye irritation.

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

No information available.

SEC	FION 5: Firefighting measures		
51	Extinguishing media		
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.	2. Special hazards arising from the substance or mixture		
	Hazardous combustion products:	Hydrogen chloride (HCl), chlorine (Cl_2) and chlorine dioxide (ClO_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 vapours. Provide adequate ventilation. Special danger of slipping by leaked/spilled product. 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 rivers.



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6.3. Methods and material for containment and cleaning up

Containment

For large spills, dyke spilled material or otherwise contain material to ensure runoff does not reach a waterway. Cover or seal drains.

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). 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 breathing aerosols and vapours. 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 food and drink.

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 and kept upright to prevent any leakage.
Advice on common storage:	Not necessary
Further information on storage conditions:	Protect from heat and direct sunlight.
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

- [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: <u>www.dguv.de/publikationen</u>



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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

	Limit values					
Country	Long term	n (8 hours)) Short term (15 minutes)		Legal basis	Remarks
	ррт	mg/m³	ррт	mg/m³		
Chlorine (CAS No: 7782-50-5) as decomposition product of sodium hypochlorite						
EU	-	-	0.5	1.5	2006/15/EC	-
UK	-	-	0.5	1.5	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

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

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 EN 166	
Skin protection:		
Hand protection:	Protective gloves according to EN 374 <u>Splash guard:</u> Disposable gloves made of nitrile rubber (thickness 0.11 mm) <u>Permanent contact (> 480 min):</u> 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		

Do not discharge into drains.

SECTION 9: Physical and chemical properties

ALPRO MEDICAL GMBH

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9.1.	1. Information on basic physical and chemical properties		
	Appearance:	clear, yellowish liquid	
	Odour:	of chlorine	
	Odour threshold:	no data available	
	pH (undiluted):	11.5 – 12.5	(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:	1.015 - 1.020	(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:	1.3374-1.3380	(20 °C)
	Electrical conductivity (undiluted):	35-40 mS/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 relatively stable when handled and stored as intended. A small amount of sodium hypochlorite decomposes even at room temperature with release of oxygen.

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Heat, direct sunlight



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10.5. Incompatible materials

Acids, oxidants

10.6. Hazardous decomposition products

Chlorine (Cl₂), hydrogen chloride (HCl), chlorine dioxide (ClO₂)

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

Causes skin irritation. [calculation method]

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.

STOT-single exposure

Product

No classification. [calculation method]

Ingredients

Sodium hypochlorite (CAS No: 7681-52-9): May cause respiratory irritation.



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STOT-repeated exposure

Product

No data available.

Aspiration hazard

Product

No data available.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects. [Calculation method]

12.2. Persistence and degradability

Biodegradability:

The criteria of biodegradability are not applicable on inorganic 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 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 10 03* aqueous concentrates containing hazardous substances

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).



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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. 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



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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 hazard classes and H-phrases

Hazard classes

Aquatic Acute	Acute aquatic hazard
Aquatic Chronic	Long-term aquatic hazard
Eye Irrit.	Eye irritation
Met. Corr.	Substance or mixture corrosive to metals
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity (single exposure)

H-phrases (Hazard statements)

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

EUH-phrases (Supplemental hazard information and label elements)

EUH031 Contact with acids liberates toxic gas.

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)
- BGRBerufsgenossenschaftliche Regeln (English: Employers' liability insurance association rules)BSBritish Standards
- CAS <u>Chemical Abstracts Service</u>
- CLP Regulation on <u>Classification</u>, <u>Labelling and Packaging of Substances and Mixtures</u>
- [DE] National German regulations
- DGUV <u>Deutsche Gesetzliche Unfallversicherung</u> (English: German statutory accident insurance)
- EC <u>E</u>uropean <u>C</u>ommunity
- EEC <u>European Economic Community</u>



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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>Gemeinsames Ministerialblatt</u> (English: Joint Ministerial Gazette)	
IATA-DGR	International <u>Air Transport Association - Dangerous Goods 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 Maritime Code for Dangerous Goods	
LGK	Lagerklasse (English: Storage class)	
MARPOL	International Convention for the Prevention of Marine Pollution from Sh	ips
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</u> , <u>Evaluation</u> , <u>Authorisation</u> and Restriction of <u>Ch</u> emicals	
RID	<u>R</u> èglement concernant le transport <u>International ferroviaire de marchan</u>	dises <u>D</u> angereuses
	(Regulations Concerning the International Carriage of Dangerous Goods	by Rail)
TRGS	Technische Regeln für Gefahrstoffe (English: Technical Rules for Hazardo	us Substances)
UN	<u>U</u> nited <u>N</u> ations	
UTC	Coordinated Universal Time (French: Temps Universel Coordonné)	
vPvB	Very persistent and very bioaccumulative	

16.3. 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.



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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.