Hypochlorous Acid (HOCl) 100, 200 and 500 ppm

Ready to use cleaning solution

Not hazardous | Not a dangerous good | Store below 25°C, in the dark

1 IDENTIFICATION

Product identifier	Hypochlorous Acid (HOCl) 100, 200 and 500 ppm
Other names	Hypochlorous acid solution; HOCl; electrolysed water. Strengths 100, 200 and 500 ppm. Pack sizes 500 mL, 1 L, 5 L and 15 L; also in 100 mL, 500 mL and 1 L spray bottles
Recommended use	Cleaning hard, non-porous surfaces, benches, equipment and tools in laboratories, mycology and general commercial settings
Restrictions on use	Not for use on skin, in eyes or as a therapeutic good. Not a hospital grade or household grade disinfectant. Do not swallow. Do not mix with acids, ammonia or other cleaning chemicals. Rinse food contact surfaces with drinking water after use
Australian supplier	Rootlab Technologies Pty Ltd, ABN 52 682 799 711
Address	Unit 14, 49 Carrington Road, Marrickville NSW 2204, Australia
Telephone and email	1300 386 487 · info@rootlab.com.au
Website	www.rootlab.com.au

EMERGENCY TELEPHONE NUMBERS

Rootlab, 24 hours
+61 416 399 905

Rootlab office hours
1300 386 487

Poisons Information Centre
13 11 26

Fire, police, ambulance
000

2 HAZARD IDENTIFICATION

Not classified as hazardous

Not a hazardous chemical according to the criteria of the model Work Health and Safety Regulations (GHS Revision 7) as adopted in each Australian state and territory. No signal word, pictograms, hazard statements or precautionary statements are required. Not a dangerous good under the Australian Dangerous Goods Code. Not scheduled under the Poisons Standard (SUSMP).

Other hazards: may cause mild, temporary eye irritation. Mixing with acids, ammonia or other cleaning chemicals can release chlorine or chloramine gas, which is toxic if inhaled.

Hypochlorous Acid (HOCl) 100, 200 and 500 ppm

Composition, first aid and firefighting

3 COMPOSITION (MIXTURE)

INGREDIENT	CAS NO.	% W/W	HAZARD STATEMENTS
Water (electrolysed)	7732-18-5	**>99.8**	None
Hypochlorous acid	7790-92-3	**approx. 0.01 to 0.05**	None at this concentration

Hypochlorous acid content is 100, 200 or 500 ppm (mg/L), depending on the strength, produced by electrolysis of salt water. Other ingredients, determined not to be hazardous, make up the product to 100%.

4 FIRST AID MEASURES

If poisoning occurs, contact a doctor or the **Poisons Information Centre on 13 11 26** (24 hours, Australia wide). In an emergency call 000.

SWALLOWED
Rinse mouth with water and give a glass of water to drink. Do not induce vomiting. Seek medical advice if unwell.

EYES
Flush with plenty of running water for at least 15 minutes, holding eyelids apart, or until advised to stop by the Poisons Information Centre. Remove contact lenses if easy to do. Seek medical advice if irritation persists.

SKIN
Rinse with plenty of water. Remove contaminated clothing. Seek medical advice if irritation develops.

INHALED
Not volatile. If spray mist causes irritation, move to fresh air. If chlorine gas was released by mixing, move to fresh air at once and seek medical advice.

Advice to doctor: treat symptomatically. Product is dilute (0.01 to 0.05%) hypochlorous acid at pH 5.5 to 6.5 with low systemic toxicity. Show this SDS. **First aid facilities:** eye wash station to AS 4775 where bulk containers are decanted.

5 FIREFIGHTING MEASURES

Extinguishing media	Non-combustible. Use media suited to the surrounding fire.
Specific hazards	Heating to dryness or contact with acids may release small amounts of chlorine gas.
Advice for firefighters	Wear self-contained breathing apparatus and protective clothing. Cool containers with water spray.
Hazchem code	None allocated (not a dangerous good under the ADG Code)

Hypochlorous Acid (HOCl) 100, 200 and 500 ppm

Spills, handling and storage

6 ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear the PPE in Section 8. Wet floors may be slippery.
Environmental precautions	Prevent large spills entering stormwater drains and waterways. Notify the state or territory environment protection authority if a large spill reaches a waterway.
Clean-up	Mop or wipe up small spills and rinse the area with water. Contain large spills with absorbent material such as sand or vermiculite and place in a labelled container for disposal.

7 HANDLING AND STORAGE

Safe handling	Use as supplied. Do not mix with acids, ammonia or other cleaning chemicals. Avoid spraying towards the face. Keep the container closed when not in use.
Storage	Store below 25°C, in the dark and out of direct sunlight, in the original tightly closed opaque container. Protect from freezing. Keep out of reach of children.
Shelf life note	Strength slowly falls over time, faster with heat, light and air exposure.
Incompatible materials	Acids, ammonia and ammonium compounds, strong reducing agents, other cleaning chemicals

Hypochlorous Acid (HOCl) 100, 200 and 500 ppm

Exposure controls and physical properties

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure standards	No value is assigned to this product in the Safe Work Australia Workplace Exposure Standards (WES) or, from 1 December 2026, the Workplace Exposure Limits (WEL). If chlorine gas is released by mixing with acids: **chlorine peak limitation 1 ppm (3 mg/m³)**, carried over unchanged into the WEL list on 1 December 2026 and under ministerial review.
Engineering controls	General ventilation is adequate. Provide extra ventilation when fogging or misting in small enclosed rooms.

PPE	REQUIREMENT
Eyes and face	Safety glasses where splashing or spray mist is likely (AS/NZS 1336, AS/NZS 1337.1)
Hands	Not normally required. Nitrile gloves for prolonged or repeated contact (AS/NZS 2161 series)
Body	Normal work clothing
Respiratory	Not normally required with general ventilation. If chlorine gas may be present, use a respirator selected, fitted and maintained to AS/NZS 1715 and AS/NZS 1716

Hygiene: wash hands after handling and before eating, drinking or smoking. Select PPE by workplace risk assessment under the WHS Regulations.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE **Clear, colourless liquid**	ODOUR **Faint to mild chlorine odour**	PH **5.5 to 6.5**
AVAILABLE CHLORINE **100, 200 or 500 ppm (0.01, 0.02 or 0.05%)**	SOLUBILITY **Miscible with water**	FLAMMABILITY **Not flammable**
BOILING POINT **Approx. 100°C**	RELATIVE DENSITY **Approx. 1.0**	FLASH POINT **Not applicable**

Hypochlorous Acid (HOCl) 100, 200 and 500 ppm

Reactivity, toxicology and ecology

10 STABILITY AND REACTIVITY

Reactivity and stability	Stable under recommended storage conditions. Slowly loses strength over time.
Hazardous reactions	Releases chlorine or chloramine gas when mixed with acids or ammonia
Conditions to avoid	Temperatures above 25°C, direct sunlight, freezing, open containers
Incompatible materials	Acids, ammonia and ammonium compounds, strong reducing agents, other cleaning chemicals
Decomposition products	Mainly dilute salt water and oxygen. Small amounts of chlorine if heated or acidified.

11 TOXICOLOGICAL INFORMATION

Acute toxicity	Not expected to be harmful at 100 to 500 ppm
Skin and eye irritation	Not classified under GHS Revision 7. May cause mild, temporary eye irritation. Not intended for use on skin.
Sensitisation	None known
Mutagenicity, carcinogenicity, reproductive toxicity	Not classified
Target organ toxicity	No data available
Aspiration hazard	Not classified
Likely routes of exposure	Eye contact, skin contact, swallowing

12 ECOLOGICAL INFORMATION

Ecotoxicity	Free chlorine can harm aquatic life. Avoid releasing large quantities into waterways.
Persistence and mobility	Breaks down quickly to salt water and oxygen. Not persistent and does not bioaccumulate.

Hypochlorous Acid (HOCl) 100, 200 and 500 ppm

Disposal, transport and regulations

13 DISPOSAL CONSIDERATIONS

Product and packaging	Small quantities may be diluted with plenty of water and flushed to sewer where local trade waste rules allow. Dispose of large quantities in accordance with the requirements of the state or territory environment protection authority and local council. Do not mix with acid wastes. Rinse and recycle empty containers.

14 TRANSPORT INFORMATION

Not classified as a dangerous good under the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code, current edition). No placarding, dangerous goods documents or segregation required.

UN NUMBER	SHIPPING NAME	CLASS, PACKING GROUP	HAZCHEM, EPG
None allocated	**Not regulated**	**None**	**None allocated**

15 REGULATORY INFORMATION

WHS Regulations	Not a hazardous chemical under the model WHS Regulations (GHS Revision 7). An SDS is not legally required for a non-hazardous chemical; this SDS is provided to support safe use.
Poisons Standard (SUSMP)	Not scheduled at this concentration
Therapeutic goods (TGA)	Supplied as a hard surface cleaner, not as a therapeutic good. Not entered on the ARTG. No claims are made against specific viruses or disease.
Industrial chemicals inventory (AIIC)	All ingredients listed on the Australian Inventory of Industrial Chemicals (AICIS)

Hypochlorous Acid (HOCl) 100, 200 and 500 ppm

Document control

16 OTHER INFORMATION

PREPARED	VERSION	REVIEW BY	PREPARED TO
25 Nov 2026	2.2	25 Nov 2031	Safe Work Australia Model Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals

Abbreviations: ADG, Australian Dangerous Goods Code; AICIS, Australian Industrial Chemicals Introduction Scheme; ARTG, Australian Register of Therapeutic Goods; EPG, Emergency Procedure Guide; GHS, Globally Harmonized System; HOCl, hypochlorous acid; SUSMP, Poisons Standard; WES/WEL, workplace exposure standard/limit.

This SDS summarises our best knowledge of the hazards of this product and how to use it safely. It is based on published data for dilute hypochlorous acid. Users should assess it against their own conditions of use. Contact Rootlab for further information.