

Section 1. Identification of the material and the supplier

Product: **Clorina**
Product Code: 701074209
Product Use: For wipe disinfection of surfaces, inventory and medical devices. For professional use.

ANZ Distributor:	Getinge Australia	Getinge Australia (NZ Branch)
Address	11 Help Street Level 7, Suite 701 Chatswood NSW 2067 AUS	600 Great South Road Building A, Ground Floor, unit D Ellerslie, Auckland, 1051 NZ
Telephone	1800 438 464	0800 1 438 4643

Emergency Telephone: **AUS +61 2 8014 4558**
NZ +64 9 929 1483 or **0800 764 766** (National Poison Centre)

Date of SDS Preparation: 13 June 2023

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code:
Cleaning Products (Corrosive) Group Standard 2020 – HSR002526

Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Respiratory sensitisation Cat. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	H318	Causes serious eye damage.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P234	Keep only in original packaging.
P260	Do not breathe dust.
P264	Wash hands thoroughly after handling.

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P270	Do not eat, drink or smoke when using this product.
P280	Wear protective clothing as detailed in Section 8.
P285	In case of inadequate ventilation wear respiratory protection.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Tosylchloramide sodium	100	7080-50-4

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin	Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. Seek immediate medical attention.
If Swallowed	Rinse mouth. Do NOT induce vomiting. Never give anything to the mouth of an unconscious person. Give small amounts of water to drink. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: Harmful if swallowed.

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Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin: Causes severe skin burns.
Eye: Causes serious eye damage.

Section 5. Fire Fighting Measures

Hazard Type	Not flammable or combustible
Hazards from combustion products	During heating or in case of fire poisonous gas may develop: For example: Hydrochloric acid (HCl), nitrous gases (NOx) and sulfur dioxide (SO ₂).
Suitable Extinguishing media	Powder, water spray or foam.
Precautions for firefighters and special protective clothing	Wear self-contained breathing apparatus. Wear fully protective suit.
HAZCHEM CODE	2X

Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel. Do not inhale dust. Avoid contact with eyes and skin. For personal protection information, see section 8.

Do not allow to reach sewage system / surface or ground water.

Collect as much as possible in a container for disposal. Rinse off the rest with water. Dispose of according to Local Regulations detailed in Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Keep only in original packaging.
- Do not breathe dust, fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective clothing as detailed in Section 8.
- In case of inadequate ventilation wear respiratory protection.
- Ensure good ventilation / exhaustion at the workplace.
- Take off all contaminated clothing immediately.
- Avoid contact with eyes and skin.

Precautions for Storage:

- Keep out of reach of children.
- Store locked up.
- Store cool but frost-free, well ventilated and dry area.
- Keep container tightly closed.
- Keep separate from food.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm	mg/m ³	STEL ppm	mg/m ³
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No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls

Keep away from foodstuff, beverages and feed. Take off all contaminated clothing immediately. Wash hands before breaks and at end of work. Avoid contact with skin and eyes.

Personal Protection Equipment:



Eyes	When handling the concentrated product, use tight-fitting eye protection. If there is no risk of splashing, no eye protection is required when using the diluted product.
Hands	Impermeable gloves The wearing of liquid-tight gloves, without changing over four hours daily, is to be regarded as stressful and may not be a permanent measure. Penetration time of glove material The resistance of gloves is dependent on many features (material, layer thickness, manufacturer, temperature, stress and duration of contact) and not predictable in advance. Each user has to test the resistance of the gloves for his personal use. Penetration times according to EN 374 are specified by manufacturers and provide guidance for the comparison of gloves. Material recommendations Nitrile rubber or Butyle rubber
Skin	Protective clothing In order to prevent skin irritations in the professional field, the following is - regardless of the actual contact with disinfectants - recommended: Fast skin penetrating care cream in between if needed. A greasy cream after washing at the end of work or before work breaks.
Respiratory	Respiratory protection is recommended for handling the Clorina powder and, depending on the ventilation situation, for a certain time afterwards. You can use respiratory protection with a particle filter "P2". The respirator should have an exhalation valve or similar. You should make sure that the respiratory protection fits snugly on the face. This is the only way that all of the inhaled air really passes through the filter.
Hygiene Measures	Wash hands before breaks and after work. Avoid contact with skin and eyes.

Section 9 Physical and Chemical Properties

Appearance	Hard, fine powder
Colour	White
Odour	Characteristic, weak after chlorine
Odour Threshold	Not available
pH @ 20°C	Ca. 8 (50g/L H ₂ O) @ 20°C
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available

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Vapour Density	Not available
Density @ 20°C	1430 kg/m ³
Bulk Density	0.7 g/ml +/- 0.1
Water Solubility	150 g/L (25°C)
Partition Coefficient:	Not available
Auto-ignition Temperature	176°C
Viscosity	5.4 cSt
Oxidising Properties	Not determined, has an oxidizing effect

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	No hazardous reactions if used as described.
Conditions to Avoid	Refer to Section 7
Incompatible Materials	Water vapour, acids
Hazardous Decomposition Products	No decomposition if stored and used as described. In contact with water vapor unstable. In contact with acid, develops toxic gases.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Oral LD50: rat, mouse: approx. 1000 mg / kg
Dermal	Does not contain any ingredients classified as acutely toxic.
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. LC50: Rat: > 0.275 mg / l (4 hours) (maximum achievable concentration)
Eye	Causes serious eye damage.
Skin	Causes severe skin burns.

Chronic Effects:

Carcinogenicity	Does not contain any ingredients classified as carcinogenic.
Reproductive Toxicity	Does not contain any ingredients classified as toxic for reproduction.
Germ Cell Mutagenicity	Does not contain any ingredients classified as mutagenic.
Aspiration	Does not contain any ingredients classified as Asp Tox.
STOT/SE	Does not contain any ingredients classified as STOT SE.
STOT/RE	Does not contain any ingredients classified as STOT RE.

Section 12. Ecotoxicological Information

Not classified as dangerous for the environment.

Product:	Fish: 96h-LC50 (Poecilia reticulata): 31 mg / l Daphnia: 48h-EC50: 4.5 mg / l
Persistence and degradability	Degradation biotic. Easily biodegradable (at low concentrations). p-Toluenesulfonamide (hydrolysis product): Easily biodegradable
Bioaccumulation	Not expected to bioaccumulate.
Mobility in Soil	No data available.
Other adverse effects	No data available.
Other information	Reproduction test with Daphnia magna: Lower threshold

Section 13. Disposal Considerations**Disposal Method:**

Dispose of surplus product and packaging via a licensed chemical waste contractor. Empty cleaned containers can be recycled where facilities exist or sent for landfill or incineration where permitted. Process effluent can normally be discharged to foul sewer (subject to consent limits). May require pH neutralization.

Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste –Corrosive" and that the label also has the Corrosive Pictogram, waste type identifier, and the business name, address, and phone number.

Disposal methods to avoid: None known.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021

**Road, Rail, Sea and Air Transport**

UN No	3263
Class - Primary	8
Packing Group	III
Proper Shipping Name	CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (tosylchloramide sodium)
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information**EPA Approval No:**

Cleaning Products (Corrosive) Group Standard 2020 – HSR002526

Trigger quantities for this substance:

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	250L
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	Only use for the intended purpose.

Section 16 Other Information**Glossary**

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.

HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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