

Safety Data Sheet

Date of Issue: 04.09.2024 Date of Expiry: 04.09.2029

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : ECP Limited

Address : PO Box 34125, Birkenhead, Auckland 0746

Telephone : +64 9 480 4386 Facsimile : +64 9 480 4385

Emergency phone number : 0800 243 622 (24 hours)

Product Name	Sodium Hypochlorite 12+%
Product Code	47688
CAS No.	7681-52-9

Recommended use : Laboratory Investigations

2: Hazard's identification

GHS Classification of the substance/ mixture

Corrosive to Metals (Category 1), H290

Skin corrosion/irritation (Category 1B), H314

Serious eye damage/eye irritation (Category 1), H318

Hazardous to the aquatic environment - acute hazard (Category 1), H400 Hazardous to the aquatic environment - chronic hazard (Category 2), H411

Pictogram (s)



DANGER

Hazard statement(s)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

2.3 Other hazards

Contact with acids liberates toxic gas

3: Composition/information on ingredients

Name	CAS	Proportion
Sodium hydroxide	1310-73-2	0-<1%
Water	7732-18-5	Remainder
Sodium hypochlorite	7681-52-9	10-15%

4: First aid measures

24 Hour Emergency Contact: 0800 CHEMCALL (0800 243 622)

New Zealand Poisons Information Centre: 0800 POISO (0800 764 766)

New Zealand Emergency Services: 111

If inhaled

After inhalation: Remove from contaminated area. To protect rescuer, use a Full-face Type B (Inorganic and acid gas) respirator or an Air line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

In case of skin contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons information centre or a doctor.

In case of eye contact

If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing with water until advised to stop by a Poisons information centre or a doctor, or for at least 15 minutes.

If swallowed

For advice, contact the National Poisons Centre at 0800 764 766 (0800 764 766) or +64 3 479 7248 or a doctor (at once). If swallowed, do not induce vomiting.

First Aid Facilities

Eye wash facilities and safety shower should be available.

Indication of immediate medical attention and special treatment needed if necessary Treat symptomatically. Ingestion of hypochlorous acid is irritating to the mucus membranes and skin but has low systematic toxicity. Buffer the acid by administering antacids. Treat as for strongly alkaline material.

Most important symptoms/ effects, acute and delayed

Causes burns.

5: Firefighting measures

Suitable extinguishing media

Use extinguishing agent suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Non-flammable. May evolve toxic gases (chlorine) when heated to decomposition.

Hazchem Code 2x

Decomposition Temperature

Not available

Precautions in connection with fire

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use water fog to cool intact containers and nearby storage areas.

6: Accidental release measures

Spills & Disposal

Container spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand. or similar), collect and place in suitable container for disposal.

Personal Protection

Wear Personal Protective Equipment (PPE) Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

Environmental Precautions

Prevent product from entering drains and waterways.

7: Handling and storage

Precautions for Safe Handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation.

Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage, sealed when not in use, vented and stored upright. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation systems.

8: Exposure controls/personal protection

Exposure Controls, Personal Protection

Exposure Standards: New Zealand Workplace (WES)

Material: Sodium hypochlorite (chlorine)

TWA: 0.5 (ppm, 1.5(mg/m3) STEL: 1 (ppm), 2.9 (mg/m3)

Peak: Not applicable

Occupational exposure limit values

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
Sodium hydroxide		TWA	2	Mg/m3	

Personal Protective Equipment

Engineering Controls

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

PPE

Eye/ Face : Wear splash-proof goggles.

Hands : Wear PVC or rubber gloves.

Body : Wear coveralls. When using large quantities or where heavy contamination

is likely, wear rubber boots and a PVC apron.

Respiratory : Where an inhalation risk exists, wear a Full-face Type B (Inorganic and Acid

gas) respirator.

9: Physical and chemical properties

Form : Liquid

Appearance : Liquid. Mixes with water
Colour : Clear to pale yellow
Odour : Chlorine odour
Decomposition temperature : No data available
Boiling Point : No data available

Solubility In water : Miscible Specific Gravity : 1.2@20°C

ph : >12

Vapour Pressure No data available **Evaporation Rate** No data available Viscosity No data available Volatile Component No data available Flash point No data available Flammability Non-flammable Auto-ignition Temperature Not applicable Explosion limit -Upper No data available **Explosion limit- Lower** No data available Molecular weight Not applicable Relative density Not applicable No data available Melting/ Freezing point

Other information : % Volatiles: >60 (water)

10: Stability and reactivity

Reactivity

Contact with acids liberates toxic gas.

Chemical Stability

Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. The amount of available chlorine diminishes over time.

Conditions to avoid

Avoid contact with foodstuffs. Avoid exposure to heat, sources of ignition, and open flame. Avoid exposure to light. Avoid contact with other chemicals. Avoid contact with acids.

Incompatible materials

Incompatible with acids, metals, metal salts, peroxides, reducing agents, and ethylene diamine tetra acetic acid. Incompatible with ammonia and ammonium compounds such as amines and ammonium salts.

Hazardous Decomposition Products

Chlorine.

Possibility of hazardous reactions

Hazardous polymerisation will not occur. Reacts exothermically with acids. Reacts with ammonia, amines, and ammonium salts to product chloramines. Decomposes on heating to produce chloride gas.

11: Toxicological information

No adverse health's effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs.

Acute Toxicity- Oral

No LD50 data available for the product.

Acute Toxicity-inhalation

No LD50 data available for the product.

Acute Toxicity-Dermal

No LD50 data available for the product.

Ingestion

Swallowing can result in nausea, vomiting, diarrhoea, abnormal pain and chemical burns to the gastrointestinal tract

Inhalation

Breathing in mists or aerosols may produce respiratory irritation. Delayed (up to 48hours) fluid build-up in the lungs may occur.

Skin

Contact with skin will result in severe irritation. Corrosive to skin- may cause skin burns.

Eve

A severe eye irritant. Corrosive to eyes: contact can cause corneal burns.

Contamination with eyes can result in permanent injury

Serious eye damage/ Irritation

Moderate irritant (rabbit). Standard Draize test

Chronic Effects

No information available for the product

12: Ecological information

Ecotoxicity

Hypochlorite's are extremely toxic to fish; Exposure to 0.5% over 96 hours resulted in death of trout

Persistence and degradability

Hypochlorite's are non-persistent in the environment and there is no accumulation potential as they gradually decompose into a salt and oxygen

Mobility

My leach to groundwater with resultant toxicity aquatic organisms

Bioaccumulation Potential

hypochlorite's are non-persistent in the environment and there is no accumulation potential as they gradually decompose into a salt and oxygen

13: Disposal considerations

Waste Disposal

Add to a large volume of reducing solution (e.g., thiosulphate, metabisulphite, but not carbon, sulphur, or strong reducer) and acidify with sulphuric acid. When reduction is

complete, add mixture to water and neutralise. Absorb with sand or similar non-combustible material and dispose of to an approved landfill site.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA - DGR International Air Travel Association - Dangerous Goods Regulations
14.1	UN Number	1791	1791	1791
14.2	UN Proper Shipping name	HYPOCLORITE SOLUTION	HYPOCLORITE SOLUTION	HYPOCLORITE SOLUTION
14.3	Transport Hazard Class	8	8	8
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	Yes	Yes	yes
14.6	Special precautions for user	none		

15: Regulatory information

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

National regulatory information

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits

Group

Standard 2006

Tracking Required: not required Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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