

## SAFETY DATA SHEET

**PRODUCT: SODIUM HYPOCHLORITE SOLUTIONS**  
(5 - 15% avail chlorine)

**Date of Issue: November 2020**

### 1. IDENTIFICATION OF CHEMICAL PRODUCT AND SUPPLIER

**PRODUCT IDENTIFICATION:**

**Product Names:**  
SODIUM HYPOCHLORITE 12.5%

**Other Names:** Pool chlorine, chlorinated soda solution, chlorine bleach.  
**Recommended Use:** Bleaching agent, purification of water, sanitizer, potable grade for drinking water.  
**Formula:** NaOCl  
**Chemical family:** Sodium hypochlorite solution

**Supplier:** Sydney Solvents Pty Ltd  
**Address:** Unit 3, 10 Production Place, Jamisontown NSW 2750  
**Telephone Number:** (02) 4722 5060  
**Emergency Telephone:** Chemcall 1800 127 406  
**ABN:** 51 104 642 695




### 2. HAZARDS IDENTIFICATION

**HAZARDOUS SUBSTANCE. DANGEROUS GOODS**

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

Poisons Schedule (SUSMP): S5 Caution.

Signal Word		DANGER	
GHS Classification	Pictogram		Hazard Statement
<b>Skin Corrosion/Irritation, Sub-Category 1C Category 1</b>	 EXCLAMATION MARK	 CORROSIVE	H315 Causes skin irritation H314 Causes severe skin burns and eye damage
<b>Acute Aquatic Toxicity, Category 1</b>	 ENVIRONMENT		H400 Very toxic to aquatic life.

## SODIUM HYPOCHLORITE SOLUTIONS

**Precautionary Statements:**

<b><u>GENERAL</u></b> P101 P102 P103	If medical advice is needed, have product container or label at hand Keep out of reach of children Read label before use
<b><u>PREVENTATIVE</u></b> P260 P264 P273 P280 P281	Do not breathe dust / fume / gas / mist / vapours / spray Wash thoroughly after handling Avoid release to the environment Wear protective gloves/eye protection/face protection Use personal protective equipment as required
<b><u>RESPONSE</u></b> P301 + P310 P302 + P352 P303 + P361 + P353 P308 + P313 P331 P332 + P313 P362 P305 + P351 + P338  P391	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician IF ON SKIN: Wash with plenty of soap and water IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse Rinse skin with water/shower IF exposed or concerned: Get medical advice/attention DO NOT induce vomiting Take off contaminated clothing and wash before reuse IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Collect spillage
<b><u>STORAGE</u></b> P405	Store locked up
<b><u>DISPOSAL</u></b> P501	Dispose of contents/container in accordance with local regulations

Other Hazards: AUH031 Contact with acids liberates toxic gas

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Synonyms:** Nil  
**Appearance:** Clear Red Liquid with solvent smell

Component	CAS Number	Proportion	Hazard Codes
Water	7732-18-5	Up to 100%	
Sodium hypochlorite	7681-52-9	5-15%	H314 H400
Sodium hydroxide	1310-73-2	<1%	H290 H314 H318

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS)

**4. FIRST AID MEASURES**

Poison Information Centres in each state can provide additional assistance for scheduled poisons. Phone 131126 from anywhere in Australia

**Description of necessary first aid measures:**

Inhalation	Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discoloration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.
Skin Contact	If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor.
Eye Contact:	Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical

	assistance. Transport promptly to hospital or medical centre. Continue to wash with large amounts of water until medical help is available
Ingestion	Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

**Indication of immediate medical attention and special treatment needed:**

Treat symptomatically. Can cause corneal burns. Delayed pulmonary oedema may result.

**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing equipment**

Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

**Specific hazards arising from the chemical**

Non-combustible material

**Special protective equipment and precautions for fire fighters**

Decomposes on heating emitting toxic fumes, including those of chlorine. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition

**Hazchem or Emergency Action Code:** 2X

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment**

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

**Environmental precautions and emergency procedures**

Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

**7. HANDLING AND STORAGE**

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

**Precautions for safe handling**

Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children

**Conditions for safe storage, including any incompatibilities**

Store in cool place and out of direct sunlight. Store away from foodstuffs. Store away from acids. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Standards:**

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Chlorine: Peak Limitation = 3 mg/m<sup>3</sup> (1 ppm)

Sodium hydroxide: Peak Limitation = 2 mg/m<sup>3</sup>

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Engineering Controls:**

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. If inhalation risk exists: Use with local exhaust ventilation or while wearing air supplied mask.

Keep containers closed when not in use.

**Personal Protection:**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Wear overalls, chemical goggles, face shield, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. If determined by a risk assessment an inhalation risk exists, wear an air supplied respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

## 9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Liquid
Colour:	Pale Yellow – Green tinge
Odour:	Chlorine
Specific Gravity:	at 20C approx. range 1.1 – 1.2
Flash Point:	Not combustible
Flammability limits	Non-flammable
pH:	Approx 12.5 (1% w/w)
Solubility in water:	Miscible in water

## 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. The amount of available chlorine diminishes over time.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerisation will not occur. Reacts exothermically with acids . Reacts with ammonia, amines and ammonium salts to product chloramines. Decomposes on heating to produce chlorine gas.
<b>Conditions to avoid:</b>	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 .
<b>Incompatible materials:</b>	Incompatible with acids , metals , metal salts , peroxides , reducing agents , and ethylene diamine tetraacetic acid . Incompatible with ammonia and ammonium compounds such as amines and ammonium salts.
<b>Hazardous decomposition products:</b>	Chlorine.

## 11. TOXICOLOGICAL INFORMATION

Information given is based on product data, knowledge of the components and the toxicology of similar products. No adverse health 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 are:

**Ingestion:**

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

**Eye contact:**

A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.

**Skin contact:**

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

**Inhalation:**

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

**Acute toxicity:** No LD50 data available for the product. For the constituent SODIUM HYPOCHLORITE: Oral LD50 (mice): 5800 mg/kg

**Serious eye damage/irritation:** Moderate irritant (rabbit). Standard Draize test

**Chronic effects:** No information available for the product.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	Avoid contaminating waterways. For SODIUM HYPOCHLORITE:
<b>Persistence/degradability:</b>	This material is biodegradable.
<b>Aquatic toxicity:</b>	Very toxic to aquatic organisms.
<b>48hr LC50 (fish):</b>	0.07 - 5.9 mg/L

## 13. DISPOSAL CONSIDERATIONS

Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Decontamination and destruction of containers should be considered.

## 14. TRANSPORT INFORMATION

### Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.



<b>UN No.</b>	1791
<b>Transport Hazard Class:</b>	8 Corrosive
<b>Packing Group:</b>	III
<b>Proper Shipping Name or Technical Name:</b>	HYPOCHLORITE SOLUTION
<b>Hazchem or Emergency Action Code:</b>	2X

### Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

<b>UN No.</b>	1791
<b>Transport Hazard Class:</b>	8 Corrosive
<b>Packing Group:</b>	III
<b>Proper Shipping Name or Technical Name:</b>	HYPOCHLORITE SOLUTION
<b>Hazchem or Emergency Action Code:</b>	2X
<b>IMDG EMS Fire:</b>	F-A
<b>IMDG EMS Spill:</b>	S-B

### Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS

<b>UN No.</b>	1791
<b>Transport Hazard Class:</b>	8 Corrosive
<b>Packing Group:</b>	III
<b>Proper Shipping Name or Technical Name:</b>	HYPOCHLORITE SOLUTION
<b>Hazchem or Emergency Action Code:</b>	2X

**15. REGULATORY INFORMATION**

**Classification:**

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

**Classification of the substance or mixture:**

Skin Corrosion - Sub-category 1C

Eye Damage - Category 1

Acute Aquatic Toxicity - Category 1

**Hazard Statement(s):**

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

**Poisons Schedule (SUSMP):** S5 Caution.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

**16. OTHER INFORMATION**

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Sydney Solvents Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

**References:**

(1) National Code of Practice for the preparation of MSDS [NOHSC:2011(2003), (2) List of Designated Hazardous Substances [NOHSC:10005:1999] (3) ADG Code 7<sup>th</sup> Edition (4) [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au)

**Contact Point:** Quality Assurance Manager Tel (02) 9807 4266

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