

## SAFETY DATA SHEET

**Product Name** CHLOR N8

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier name** LIBERATO BULK CHEMICAL & REPACK SPECIALISTS PTY. LTD.  
**Address** 1 Kalinga Way, Landsdale, WA, 6065, AUSTRALIA  
**Telephone** 1300 377 696  
**Emergency** 1300 377 696  
**Email** [sales@liberato.com.au](mailto:sales@liberato.com.au)  
**Web site** <http://www.liberato.com.au>  
**Synonym(s)** CHLOR-N8  
**Use(s)** BEVERAGE INDUSTRY • BLEACHING AGENT • COOLING WATER ADDITIVE • FOOD INDUSTRY  
 • SANITISER • TEXTILE INDUSTRY • WATER TREATMENT  
**SDS date** 05 November 2013

### 2. HAZARDS IDENTIFICATION

**CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA**

**RISK PHRASES**

R31 Contact with acids liberates toxic gas.  
 R34 Causes burns.  
 R50 Very toxic to aquatic organisms.

**SAFETY PHRASES**

S24/25 Avoid contact with skin and eyes.  
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

**CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

<b>UN number</b>	1791	<b>DG class</b>	8
<b>Packing group</b>	III	<b>Subsidiary risk(s)</b>	None Allocated
<b>Hazchem code</b>	2R		

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Identification	Classification	Content
SODIUM HYPOCHLORITE	CAS: 7681-52-9 EC: 231-668-3	T;R31 C;R34 N;R50	10 to 30%
SODIUM HYDROXIDE	CAS: 1310-73-2 EC: 215-185-5	C;R35	<1%
WATER	CAS: 7732-18-5 EC: 231-791-2	Not Available	>60%

### 4. FIRST AID MEASURES

**Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.  
**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**Product Name** CHLOR N8

**Skin** 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.

**Ingestion** For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

**Advice to doctor** Treat symptomatically.

**First aid facilities** Eye wash facilities and safety shower should be available.

## 5. FIRE FIGHTING MEASURES

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

**Fire and explosion** 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 waterfog to cool intact containers and nearby storage areas.

**Extinguishing** Use an extinguishing agent suitable for the surrounding fire.

**Hazchem code** 2R

2 Water Fog (or fine water spray if fog unavailable)

R Full protective equipment including Self Contained Breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** Wear Personal Protective Equipment (PPE) as detailed in Section 8 of this SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

**Environmental precautions** Prevent product from entering drains and waterways.

**Methods of cleaning up** Contain spillage, then cover/absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

**References** See Sections 8 and 13 for exposure controls and disposal.

## 7. STORAGE AND HANDLING

**Storage** 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.

**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.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Chlorine (Peak Limitation)	SWA (AUS)	1	3	--	--
SODIUM HYPOCHLORITE	SWA (AUS)	1	3	--	--
Sodium hydroxide (peak limitation)	SWA (AUS)	--	2	--	--

**Biological limits** No biological limit allocated.

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

**PPE**

<b>Eye / Face</b>	Wear splash-proof goggles.
<b>Hands</b>	Wear PVC or rubber gloves.
<b>Body</b>	Wear coveralls. When using large quantities or where heavy contamination is likely, wear rubber boots and a PVC apron.
<b>Respiratory</b>	Where an inhalation risk exists, wear a Type B (Inorganic gases and vapours) respirator.



---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Appearance</b>	LIGHT GREEN/YELLOW LIQUID
<b>Odour</b>	SLIGHT CHLORINATED ODOUR
<b>Flammability</b>	NON FLAMMABLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	12.5 (1% solution)
<b>Vapour density</b>	NOT AVAILABLE
<b>Specific gravity</b>	1.2
<b>Solubility (water)</b>	SOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT RELEVANT
<b>Lower explosion limit</b>	NOT RELEVANT
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE
<b>% Volatiles</b>	NOT AVAILABLE

---

## 10. STABILITY AND REACTIVITY

---

<b>Chemical stability</b>	Stable under recommended conditions of storage.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Material to avoid</b>	Incompatible with reducing agents (eg. sulphites), acids, organic materials, ammonia, ammonium compounds, metal salt and some metals. Do not mix with any other chemicals.
<b>Hazardous Decomposition Products</b>	May evolve oxides of chlorine when heated to decomposition.
<b>Hazardous Reactions</b>	Polymerization is not expected to occur.

---

## 11. TOXICOLOGICAL INFORMATION

---

<b>Health Hazard Summary</b>	Corrosive. This product has the potential to cause adverse health effects. Use safe work practices to avoid eye or skin contact and inhalation. Over exposure to chlorine vapour may result in lung tissue damage. Do not mix with other chemicals unless advised and specific instructions provided, as toxic and irritating gases may be evolved. Use safe work practices to avoid over exposure. Upon dilution, the potential for corrosive effects may be reduced.
<b>Eye</b>	Corrosive. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.
<b>Inhalation</b>	Slightly corrosive - irritant. Over exposure may result in irritation of the nose and throat, coughing, nausea and headache.
<b>Skin</b>	Corrosive - severe irritant. Contact may result in irritation, redness, pain, rash, dermatitis and

**Product Name** CHLOR N8

**Ingestion** possible burns.  
Corrosive. Ingestion may result in ulceration and burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhoea.

**Toxicity data** SODIUM HYPOCHLORITE (7681-52-9)  
LD50 (ingestion) 5800 mg/kg (mouse)  
TDLo (ingestion) 1 gm/kg (woman)  
TDLo (intravenous) 45 mg/kg (man)

SODIUM HYDROXIDE (1310-73-2)  
LD50 (intraperitoneal) 40 mg/kg (mouse)  
LDLo (ingestion) 500 mg/kg (rabbit)

---

## 12. ECOLOGICAL INFORMATION

---

**Toxicity** Hypochlorites are extremely toxic to fish; Exposure to 0.5 % over 96 hours resulted in death of trout.

**Persistence and degradability** Hypochlorites are non-persistent in the environment and there is no accumulation potential as they gradually decompose into a salt and oxygen.

**Bioaccumulative potential** Hypochlorites are non-persistent in the environment and there is no accumulation potential as they gradually decompose into a salt and oxygen.

**Mobility in soil** May leach to groundwater with resultant toxicity to aquatic organisms.

**Other adverse effects** No information provided.

---

## 13. DISPOSAL CONSIDERATIONS

---

**Waste disposal** For small amounts absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer for additional information if larger amounts are involved. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

**Legislation** Dispose of in accordance with relevant local legislation.

---

## 14. TRANSPORT INFORMATION

---

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>UN number</b>	1791	1791	1791
<b>Proper shipping name</b>	HYPOCHLORITE SOLUTION		
<b>DG class/ Division</b>	8	8	8
<b>Subsidiary risk(s)</b>	None Allocated	None Allocated	None Allocated
<b>Packing group</b>	III	III	III
<b>GTEPG</b>	8A1		
<b>Hazchem code</b>	2R		
<b>EMS</b>	F-A, S-B		

---

## 15. REGULATORY INFORMATION

---

**Poison schedule** Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Inventory Listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**  
All components are listed on AICS, or are exempt.

---

## 16. OTHER INFORMATION

---

### Additional information

**RESPIRATORS:** In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

**EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ):** Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

### Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
REACH	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

### Revision history

Revision	Description
1.0	Initial SDS Creation

**Product Name**      **CHLOR N8**

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

**Prepared by**

Risk Management Technologies  
5 Ventnor Ave, West Perth  
Western Australia 6005  
Phone: +61 8 9322 1711  
Fax: +61 8 9322 1794  
Email: info@rmt.com.au  
Web: www.rmt.com.au.

**Revision: 1**

**SDS Date: 05 November 2013**

**End of SDS**