



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name

Synonyms

Uses

SODIUM HYPOCHLORITE

CHALLENGE SODIUM HYPOCHLORITE

1.2 Uses and uses advised against

BLEACHING AGENT • CLEANING AGENT • SANITISER • SWIMMING POOL TREATMENT • WASTE TREATMENT

1.3 Details of the supplier of the product

Supplier name	CHALLENGE CHEMICALS AUST.
Address	6 Butcher St, Kwinana Beach, WA, 6167, AUSTRALIA
Telephone	(08) 9419 5577
Email	sales@challengechemicals.com.au
Website	http://www.challengechemicals.com.au

1.4 Emergency telephone numbers

Emergency

2. HAZARDS IDENTIFICATION

0414 586 164

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Not classified as a Physical Hazard

Health Hazards

Skin Corrosion/Irritation: Category 1B Serious Eye Damage / Eye Irritation: Category 1 Contact with acids liberates toxic gas.

Environmental Hazards

Aquatic Toxicity (Acute): Category 1

2.2 GHS Label elements

Signal word

DANGER





Hazard statements

Contact with acids liberates toxic gas. Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life.



PRODUCT NAME SODIUM HYPOCHLORITE

Prevention statements P260 P264 P273 P280	Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response statements	
P301 + P330 + P331 P303 + P361 + P353 P304 + P340 P305 + P351 + P338 P310 P321 P363 P391	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. 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 CENTRE or doctor/physician. Specific treatment is advised - see first aid instructions. Wash contaminated clothing before reuse. Collect spillage.
Storage statements P405	Store locked up.
Disposal statements P501	Dispose of contents/container in accordance with relevant regulations.
2.2. Other hereads	

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
SODIUM HYPOCHLORITE	7681-52-9	231-668-3	12 to 30%
WATER	7732-18-5	231-791-2	Remainder

4. FIRST AID MEASURES

4.1 Description of 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. 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.
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 Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns.

4.3 Immediate medical attention and special treatment needed

Treatment is symptomatic. Ingestion of hypochlorites releases hypochlorous acid which is irritating to the mucous membranes and skin but has low systemic toxicity. Buffer the acid by administering antacids.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

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

ChemAlert.

PRODUCT NAME SODIUM HYPOCHLORITE

5.3 Advice for firefighters

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.

5.4 Hazchem code

- 2X
- 2 Fine Water Spray.
- X Wear liquid-tight chemical protective clothing and breathing apparatus. Contain spill and run-off.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 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.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 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.

7.2 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.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
ingreatent		ppm	mg/m³	ppm	mg/m³
Chlorine (Peak Limitation)	SWA [AUS]	1	3		
SODIUM HYPOCHLORITE	SWA [AUS]	1	3		

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

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.



PRODUCT NAME SODIUM HYPOCHLORITE

PPE

Eye / FaceWear splash-proof goggles.HandsWear PVC or rubber gloves.BodyWear coveralls. When using large quantities or where heavy contamination is likely, wear rubber boots and
a PVC apron.RespiratoryWhere an inhalation risk exists, wear a Full-face Type B (Inorganic and Acid gas) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

CLEAR PALE YELLOW TO GREEN LIQUID
CHLORINE ODOUR
NON FLAMMABLE
NOT RELEVANT
> 100°C
-25°C
AS FOR WATER
12.5 (10 % solution)
NOT AVAILABLE
1.17 to 1.22
SOLUBLE
17.5 mm Hg @ 20°C
NOT RELEVANT
NOT RELEVANT
NOT AVAILABLE
80 % to 95 %

10. STABILITY AND REACTIVITY

10.1 Reactivity

Contact with acids may liberate toxic chlorine gas.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible (sometimes violently) with oxidising agents (e.g. peroxides), acids (especially hydrochloric - evolving chlorine gas), organic materials, reducing agents (e.g. sulphites), metallic powders, amines, ammonia and heat sources.

10.6 Hazardous decomposition products

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

ChemAlert.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion may result in burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Contact with acids may liberate toxic chlorine gas.

Information available for the ingredients:

Ingredient		Oral LD50	Dermal LD50	Inhalation LC50
SODIUM HYPOCHLOF	RITE	5800 mg/kg (mouse)		
Skin	Causes burns. Contact may result in irritation, redness, pain, rash, dermatitis and possible burns.			ossible burns.
Еуе	Causes burns. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.			rneal burns and possible
Sensitisation	Not classified as causing skin	n or respiratory sensitisatio	n.	
Mutagenicity	Not classified as a mutagen.			
Carcinogenicity	Not classified as a carcinogen.			
Reproductive	Not classified as a reproductive toxin.			
STOT - single exposure	Over exposure may result in mucous membrane irritation of the respiratory tract, coughing and possible burns. High level exposure may result in ulceration of the respiratory tract and breathing difficulties. 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.			
STOT - repeated exposure	Not classified as causing organ damage from repeated exposure. Adverse effects are generally associated with single exposure.		s are generally associated	
Aspiration	Not classified as causing aspiration.			

12. ECOLOGICAL INFORMATION

12.1 Toxicity

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

12.2 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.

12.3 Bioaccumulative potential

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

12.4 Mobility in soil

May leach to groundwater with resultant toxicity to aquatic organisms.

12.5 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposalAdd to a large volume of reducing solution (eg thiosulphate, metabisulphite, but not carbon, sulphur or
strong reducer) and acidify with 3M 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.
Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

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

ChemAlert.



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1791	1791	1791
14.2 Proper Shipping Name	HYPOCHLORITE SOLUTION	HYPOCHLORITE SOLUTION	HYPOCHLORITE SOLUTION
14.3 Transport hazard class	8	8	8
14.4 Packing Group	II	II	II

14.5 Environmental hazards

Marine Pollutant.

14.6 Special precautions for user

Hazchem code	2X
GTEPG	8A1
EmS	F-A, S-B

15. REGULATORY INFORMATION

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

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

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

Inventory listings AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) All components are listed on AIIC, 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 AVERAGES: 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 form of product, 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: form of product; 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 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				
	EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)				
	GHS	Globally Harmonized System				
	GTEPG	Group Text Emergency Procedure Guide				
	IARC	International Agency for Research on Cancer				
	LC50	Lethal Concentration, 50% / Median Lethal Concentration				
	LD50	Lethal Dose, 50% / Median Lethal Dose				
	mg/m³	Milligrams per Cubic Metre				
	OEL	Occupational Exposure Limit				
	рН	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).				
	ppm	Parts Per Million				
	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				
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 of manufacturer, the current sta at the time of directly from th	on information concerning the product which has been provided to RMT by the importer or supplier or obtained from third party sources and is believed to represent ate of knowledge as to the appropriate safety and handling precautions for the product f issue. Further clarification regarding any aspect of the product should be obtained he manufacturer, importer or supplier.				
	While RMT h does not prov accepts no lia suffered or ind in this SDS.	as taken all due care to include accurate and up-to-date information in this SDS, it vide any warranty as to accuracy or completeness. As far as lawfully possible, RMT ability for any loss, injury or damage (including consequential loss) which may be curred by any person as a consequence of their reliance on the information contained				
Prepared by	Risk Manager 5 Ventnor Ave Western Austr Phone: +61 8 Fax: +61 8 93 Email: info@rr Web: www.rm	nent Technologies e, West Perth alia 6005 9322 1711 22 1794 nt.com.au tglobal.com				

[End of SDS]

