



water, the liquid of life

# Material Safety Data Sheet

**AQUACHLOR ZAPPIT**

Infosafe No.: MTBXV  
Issued Date: 31/12/2013  
Issued by: WATERCO LIMITED

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name**

AQUACHLOR ZAPPIT

**Product Code**

A67412

**Company Name**

WATERCO LIMITED

**Address**

36 South Street Rydalmere  
NSW 2116 Australia

**Emergency Tel.**

Australia 1800 638 556 land line for transport by air and sea +61 438 465960/ New Zealand 0800 154 666 land line for transport by air and sea +64 962 390 85

**Telephone/Fax Number**

Tel: 61 2 9898 8600

**Recommended Use**

Pool chemical, bleaching agent, oxidising agent.

**Other Names**

Name	Product Code
Calcium Hypochlorite	

**Additional Information**

Pack Size: 500 g

## 2. HAZARD IDENTIFICATION

**Hazard Classification**

HAZARDOUS SUBSTANCE.  
DANGEROUS GOODS.

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).  
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

**Risk Phrase(s)**

R8 Contact with combustible material may cause fire.  
R22 Harmful if swallowed.  
R31 Contact with acids liberates toxic gas.  
R34 Causes burns.  
R50 Very toxic to aquatic organisms.

### Safety Phrase(s)

S1 Keep locked up.

S2 Keep out of reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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.

S61 Avoid release to the environment.

### Medical Conditions Generally Aggravated by Exposure

Asthma and respiratory and cardiovascular disease.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

---

### Ingredients

Name	CAS	Proportion
Calcium Hypochlorite (as available chlorine)	7778-54-3	65-68 %
Inert Ingredients (includes 5.5 - 10% moisture)		32-35 %

### Other Information

† Where they are present in this product and other ingredients of this material are not hazardous, as defined by either inclusion in the List of Designated Hazardous Substance or classified in accordance with the Approved Criteria for Defining a Hazardous Substance, and published by the National Occupational Health and Safety Commission/AGPS, 1999

## 4. FIRST-AID MEASURES

---

### First Aid Measures

Take a copy of this MSDS to medical advisers if signs or symptoms of overexposure occur and medical attention is required.

### Inhalation

Remove victim from exposure – avoid becoming a casualty. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible – either on site or at the nearest hospital,

### Ingestion

DO NOT INDUCE VOMITING. Wash out mouth with water and give plenty of water to drink. Seek immediate attention.

### Skin

Immediately wash affected areas with copious quantities of running water. Remove contaminated clothing and wash before re-use. If irritation, swelling, redness, blistering or irritation occurs seek medical advice.

### Eye

If contact with the eye(s) occurs, wash with copious amounts of water for approximately 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Seek immediate medical attentions.

### First Aid Facilities

Eye wash station, safety shower and normal washroom facilities.

### Advice to Doctor

Treat symptomatically or consult a Poisons Information Centre.

## 5. FIRE-FIGHTING MEASURES

---

### Suitable Extinguishing Media

Use flooding amounts of water from a distance. Take care as contact with water will release toxic chlorine gas. Do not use foam or dry agent.

### Specific Methods

Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.

**Hazchem Code**

1W

**Other Information**

Other Precautions: This product is non-combustible, however it is a strong oxidizer and contact with reducing agents or combustible materials may cause fire. Keep away from heat, sparks or naked flames. Heating may cause explosion. Contact with strong acids may generate heat. Contact with strong alkalis may generate heat.

## 6. ACCIDENTAL RELEASE MEASURES

---

**Emergency Procedures**

Remove all sources of heat and ignition. Increase ventilation. Evacuate all unnecessary personnel. Avoid contact with combustibles and other incompatible materials. Wear appropriate breathing apparatus and full protective clothing to minimize skin and eye exposure. Collect with spark-free tools avoiding dust generation and place into a suitable labelled container for subsequent disposal. Prevent entry into drains, waterways or confined areas. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

## 7. HANDLING AND STORAGE

---

**Precautions for Safe Handling**

Wear appropriate protective equipment and clothing. Use in a well ventilated area. Keep containers closed when not in use. Avoid spillage onto floor - keep it clean at all times. It is essential that all who come into contact with this material maintain high standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or going to the toilet.

**Conditions for Safe Storage**

Store in a cool, dry, well-ventilated area out of direct sunlight. Store away from foodstuffs, incompatible materials and sources of heat or ignition. Keep containers securely sealed and protected against physical damage.

**Other Information**

Incompatibilities: This product is a powerful oxidizer. Contact with wood, cotton, straw or oils may cause fire. Add the product to water.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

**National Exposure Standards**

No ingredients in this product have exposure standards, as outlined in the standard Exposure Standards for Atmospheric Contaminants in the Occupational Environment third edition, published by the National Occupational Health and Safety Commission/AGPS, 1995. However, an exposure standard exists for the decomposition product:

Ingredient: Chlorine, TWA 1ppm, 3 mg/m<sup>3</sup>, STEL Peak limitation ppm, mg/m<sup>3</sup>

Note: TWA - Time Weighted Average over an eight hour shift.

**Engineering Controls**

Avoid generating and inhaling dusts. Use in a well ventilated area only. Keep containers in a well ventilated area. Local exhaust ventilation system may be required, especially if chlorine gas is evolved.

**Respiratory Protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable acid gas filter and P1 or P2 particulate filter should be used. Final choice of appropriate breathing protection is dependent upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian Standards AS/NZS 1715, Selection, use and maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices.

**Eye Protection**

Safety glasses with side shields or goggles should be worn as described in Australian Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

**Body Protection**

Suitable protective clothing should be worn e.g. cotton overalls buttoned at neck and wrist.

Impervious PVC or rubber gloves should be worn.

### Hygiene Measures

Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking or using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

### Appearance

Off white granular powder with a strong chlorine odour.

### Melting Point

Not available

### Freezing Point

Not available

### Boiling Point

Not available

### Solubility in Water

18% @ 25°C

### Specific Gravity

Not applicable

### pH Value

10.5-11.5 (1% solution)

### Vapour Pressure

Not available

### Flash Point

Not applicable

### Flammable Limits - Lower

Not applicable

### Flammable Limits - Upper

Not applicable

## 10. STABILITY AND REACTIVITY

---

### Chemical Stability

Rapidly decomposes on exposure to air. May decompose violently if exposed to heat or direct sunlight. Thermally unstable.

### Conditions to Avoid

Avoid high temperatures and high humidity.

### Incompatible materials

The substance is an oxidant and reacts with acids, reducing agents, organic, nitrogen containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), corrosive, flammable or combustible materials. Forms explosive compounds with ammonia and amines. Keep away from primary aliphatic or aromatic amines, lubricating oils, damp sulphur, organic thiols or sulphides, metal oxides, nitro methane, alcohols, glycerol, phenol, di-ethylene glycol mono ethyl ether and carbon.

Contact with these products could produce ignition or explosion. Reacts with other oxidising agents such as Dichloroisocyanuric acid, dry, and its salts, and Trichloroisocyanuric acid, dry, and its salts. Reacts with water and acids releasing chlorine gas.

### Hazardous Decomposition Products

Thermal decomposition products include toxic chlorine gas.

## 11. TOXICOLOGICAL INFORMATION

---

### Inhalation

The vapour is an irritant to the mucous membranes and respiratory tract. Inhalation of dust will result in respiratory irritation. Inhalation may result in headaches, dizziness and possible nausea. May also cause burns to the respiratory tract with the production of lung edema which can result in shortness of breath, wheezing, choking, chest pain and impairment of lung function. Inhalation of high concentrations can result in permanent lung damage.

### **Ingestion**

Harmful if swallowed. Ingestion may cause nausea, vomiting, shock and coma. Corrosive. Will cause severe damage to the mucous membranes, including irritation and/or burns to the entire gastrointestinal tract. This is characterised by nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue ulceration. May also cause circulatory collapse, cyanosis, shock, confusion, delirium and swelling of the throat or tongue resulting in obstruction of the airway.

### **Skin**

Harmful in contact with skin. Corrosive to skin – causes burns. Dermal exposure can cause severe irritation and/or burns characterised by redness, swelling and scab formation. Skin contact may also cause eruptions and eczema.

### **Eye**

Causes burns and is a severe eye irritant. Contact may cause impairment of vision or corneal damage,

### **Chronic Effects**

Prolonged skin exposure may cause destruction of the dermis with impairment of the skin at site of contact to regenerate.

### **Acute Toxicity - Oral**

LD50 (rat) = 850 mg/kg

LD50 (human) = >15g/kg

### **Acute Toxicity - Dermal**

LD50 (rabbit) = 1000 mg/kg

## **12. ECOLOGICAL INFORMATION**

---

### **Ecological information**

Highly toxic to aquatic life. Avoid contaminating waterways. Breaks down in sunlight.

### **Acute Toxicity - Fish**

Fish 0.5 ppm/trout/killed/fresh water.

## **13. DISPOSAL CONSIDERATIONS**

---

### **Container Disposal**

Dispose of according to relevant local, state and federal government regulations.

## **14. TRANSPORT INFORMATION**

---

### **U.N. Number**

2880

### **Proper Shipping Name**

CALCIUM HYPOCHLORITE, HYDRATED

### **DG Class**

5.1

### **Packing Group**

II

### **Hazchem Code**

1W

### **Special Precautions for User**

This material is classified as a Class 5.1 Dangerous Good according to the Australian Code for the Transport of Dangerous Goods. Class 5.1 oxidising agents shall not be loaded or packed in the same vehicle or freight as:

Class 1 – Explosives

Class 2.1 – Flammable Gases

Class 2.3 – Toxic Gases

Class 3 – Flammable Liquids

Class 4.1 – Flammable Solids

Class 4.2 – Spontaneously Combustible Substances

Class 4.3 – Dangerous When Wet Substances

Class 5.2 – Organic Peroxides

Class 6 – Toxic Substances (where the toxic substances are fire risk substances)

Class 7 – Radioactive Substances

Class 8 – Corrosive Substances

Class 9 – Miscellaneous Dangerous Goods (where the miscellaneous dangerous goods are fire risk substances), or Fire Risk Substances or Combustible Liquids

**IERG Number**

31

## 15. REGULATORY INFORMATION

---

**Regulatory information**

Product: Calcium Hypochlorite (as available chlorine) (CAS: 7778-54-3) is found in the following regulatory lists:

Hazardous Substances Information System

High Volume Industrial Chemicals List (HVICL)

International Council of chemical Associations (ICCA) – High Production Volume List

New Zealand Inventory of Chemicals (NZIoC) HSNO Approval Code: HSR001317

**Poisons Schedule**

S5

**Hazard Category**

Harmful, Corrosive, Oxidising, Dangerous for the environment

## 16. OTHER INFORMATION

---

**Other Information**

Worker Training: As a minimum all workers using this product should be shown a copy of this MSDS before first use.

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

AICS: Australian Inventory of Chemical Substances

CAS number: Chemical Abstracts Service Registry Number

Hazchem Number: Emergency action code of numbers and letters that provide information to emergency services especially fire fighters

IARC: International Agency for Research on Cancer

ASCC: Office of the Australian Safety and Compensation Council

NOS: Not otherwise specified

NTP: National Toxicology Program (USA)

R-Phrase: Risk Phrase

SUSDP: Standard for the Uniform Scheduling of Drugs & Poisons

UN Number: United Nations Number

This material safety data sheet (MSDS):

1. Is produced by Waterco Ltd for use in Australia, and is based on information supplied to Waterco Ltd by our suppliers.
2. Summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace,
3. Has been formatted to MSDS format accepted by the National Occupational Health and Safety Commission for use in Australia.
4. Has been produced following the principles and recommendation outline in the National Code of Practice for the Preparation of Material Safety Data Sheet published by the National Occupational Health and Safety Commission/AGPS, Canberra, 2003.

This MSDS has been transcribed into Infosafe NOHSC format from an original issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

## END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of MSDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Chemical Safety International Pty Ltd.