

# Safety Data Sheet



## Hazardous Substance, Dangerous Goods

### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

**Product name:** **Calcium Hypochlorite Bulk Tablets**

**Recommended use:** For the treatment of potable drinking water, industrial & agricultural water treatment.

**Supplier:** Klorman Industries Pty Ltd

**ABN:** 85 072 597 650

**Street Address:** 12 - 14 Amour Street  
Milperra NSW 2214  
Australia

**Telephone:** +612 9773 0934

**Facsimile:** +612 9773 0925

**Emergency telephone number:** **0417-399-354 (Monday to Friday 8.30am - 5.00pm EST)**

### 2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of NOHSC Australia



**Signal Word:**

Danger

**Hazard Classification:**

Oxidising solids Category 2

Acute Toxicity Oral Category 4

Skin Corrosion/Irritation Category 1

Acute Hazard to the Aquatic Environment Category 1

**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.

R41: Risk of serious damage to eyes.

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## HAZARDS IDENTIFICATION CONTINUED

### Hazard Statement(s)

H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H400	Very toxic to aquatic life

### Prevention Precautionary statement(s)

P102	Keep out of reach of children
P103	Read label before use
P210	Keep away from all sources of ignition - No smoking
P220	Keep/Store away from incompatible materials
P221	Take any precaution to avoid mixing with incompatible materials
P260	Do not breathe dust, fumes, gas, mist, vapours or spray
P264	Wash hands, face and all exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P280	Wear protective clothing, gloves, eye-face protection and suitable respirator

### Storage Precautionary Statement(s)

P405	Store locked up
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### Disposal Precautionary Statement(s)

P501	Dispose of contents/container in accordance with local, regional, national and
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## Dangerous Goods Classification

Classified as Dangerous Goods by the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail and the New Zealand NZS5433: Transport of Dangerous Goods on Land.

## Poisons Schedule (Aust): S6

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

### 3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
Calcium Hypochlorite	7778-54-3	>69%

### 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:** Remove victim from 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. Seek medical advice if effects persist.

**Skin contact:** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

**Eye contact:** If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**Ingestion:** Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

**Notes to physician:** Treat symptomatically. Effects may be delayed. Can cause corneal burns.

### 5. FIRE-FIGHTING MEASURES

**Specific hazards:** Non-combustible material.

**Fire fighting further advice:** Not combustible, however material may decompose if involved in a fire. On decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

**Hazchem Code:** 2W

**Suitable extinguishing media:** Not combustible, however, if material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

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## 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of dust. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage. Collect and seal in properly labelled containers or drums for disposal.

### LARGE SPILLS

Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

**Dangerous Goods – Initial Emergency Response Guide No: 31**

## 7. HANDLING AND STORAGE

**Handling:** Avoid skin and eye contact and inhalation of dust.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from sources of heat. Keep containers closed when not in use - check regularly for spills.

This material is classified as a Dangerous Good Class 5.1 Oxidising Substance as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### National occupational exposure limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC Australia).

However for:

	TWA		STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>		
Chlorine	1	3	Peak limitation		-	-

As published by the National Occupational Health & Safety Commission (NOHSC Australia).

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

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These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These 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.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the "National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC: 1005 (1994)]" the ingredients in this material do not have a Biological Limit Allocated.

**Engineering measures:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

**Personal protection equipment:** OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from polyvinyl chloride (PVC) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form / Colour / Odour:** White solid with chlorine odour.

<b>Solubility in water:</b>	Soluble in water
<b>Specific Gravity (20 °C):</b>	2.1
<b>Relative Vapour Density (air=1):</b>	N Av
<b>Vapour Pressure (20 °C):</b>	N Av
<b>Flash Point (°C):</b>	N Av
<b>Odour Threshold:</b>	N Av
<b>Flammability Limits (%):</b>	N Av
<b>Autoignition Temperature (°C):</b>	N Av
<b>Melting Point/Range (°C):</b>	N Av
<b>Boiling Point/Range (°C):</b>	N Av
<b>Decomposition Point (°C):</b>	N Av
<b>pH:</b>	11.5 (Aqueous solution)
<b>Moisture content (%):</b>	5-10%
<b>Molecular formula:</b>	Ca(OCl) <sub>2</sub>

(Typical values only - consult specification sheet)  
N Av = Not available      N App = Not applicable

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## 10. STABILITY AND REACTIVITY

**Stability:** Powerful oxidising agent. Calcium hypochlorite (dry or hydrated) and its mixtures are incompatible with dichloroisocyanuric acid, ammonium nitrate, trichloroisocyanuric acid, or any chloroisocyanurate.

Reacts with water liberating chlorine.

## 11. TOXICOLOGICAL INFORMATION

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:

### Acute Effects

**Inhalation:** Material may be irritant to mucous membranes and respiratory tract.

**Skin contact:** Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

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

**Ingestion:** Harmful if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns of the gastrointestinal tract.

**Long Term Effects:** No information available for product.

### Acute toxicity / Chronic toxicity

No LD50 data available for the product.

Oral LD50 (rat): 850mg/Kg

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## 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

**Ecotoxicity:** No information available.

**Persistence and degradability:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority.

## 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.

**UN No:** 2880  
**Dangerous Goods Class:** 5.1  
**Packing Group:** II  
**Hazchem Code:** 2W  
**Emergency Response Guide No:** 31

**Proper Shipping Name:** CALCIUM HYPOCHLORITE, HYDRATED

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), toxic gases (Class 2.3), flammable liquids (Class 3), flammable solids (Class 4.1), spontaneously combustible substances (Class 7), corrosive substances (Class 8), fire risk substances or combustible liquids, however exemptions may apply. Also note that fire risk substances including dangerous goods of Class 6 or Class 9 which are fire risk substances are incompatible with dangerous goods of Class 1, Class 5.1 and Class 5.2.

### MARINE TRANSPORT

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

**UN No:** 2880  
**Dangerous Goods Class:** 5.1  
**Packing Group:** II

**Proper Shipping Name:** CALCIUM HYPOCHLORITE, HYDRATED

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## AIR TRANSPORT

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

**UN No:** 2880  
**Dangerous Goods Class:** 5.1  
**Packing Group:** II **Proper Shipping Name:** CALCIUM  
HYPOCHLORITE, HYDRATED

## 15. REGULATORY INFORMATION

### Poisons Schedule (Aust): S6

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

## 16. OTHER INFORMATION

### Literary reference

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd ([chemdata.com.au](http://chemdata.com.au)) on behalf of its client.

Reason(s) For Issue: Revised

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Klorman Industries Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

All information given in this data sheet and by the company's technical staff is compiled from the information currently available to the company. The company accepts no responsibility whatsoever for its accuracy, or for any results which may be obtained by customers. Any customer who relies upon any advice or information given in this data sheet by the company or by its technical staff does so entirely at its own risk, and the company will not be liable for any loss or damage thereby suffered notwithstanding any want of care on the part of the company or its staff in compiling or giving the advice or information.

This information is given without warranty or representation. Before using any product, always read the label carefully.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.