

Safety Data Sheet



Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **CALCIUM HYPOCHLORITE, 65% AVAILABLE CHLORINE**

Recommended use: Swimming pool chemical, algaecide, biocide and oxidant.

Supplier: DuluxGroup (PNG) Pte. Ltd.
Street Address: Air Corps Road
Lae Morobe Province
PNG
Telephone: 4723633

Emergency telephone number: Australia – +613 9663 2130

2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of Safe Work Australia.



Signal Word

Danger

Hazard Classification

Oxidising Solids – Category 2
Acute Toxicity – Oral – Category 4
Skin Corrosion/Irritation – Category 1B
Serious Eye Damage/Irritation – Category 1
Specific Target Organ Toxicity (Single Exposure) – Category 3

Hazard Statement(s)

H272 May intensify fire; oxidizer
H303 May be harmful if swallowed
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H335 May cause respiratory irritation

Hazard Statement(s) - Australia Only

AUH031 Contact with acids liberates toxic gas

Safety Data Sheet



Prevention Precautionary Statement(s)

- P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220 Keep/Store away from clothing/combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe dust.
P264 Wash hands, face and all exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective clothing, gloves, eye/face protection and suitable respirator

Response Precautionary Statement(s)

- P101 If medical advice is needed, have product container or label at hand.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use water spray or fog, foam or dry agent for extinction.

Storage Precautionary Statement(s)

- P405 Store locked up
P403+233 Store in a well ventilated place. Keep container tightly closed

Disposal Precautionary Statement(s)

- P501 Dispose of contents/container in accordance with regional and national regulations

Poisons Schedule (Aust): S6

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".

Class: 5.1 Oxidising Agent

3. COMPOSITION INFORMATION

| CHEMICAL ENTITY | CAS NO. | PROPORTION |
|--|-----------|------------|
| Calcium hypochlorite | 7778-54-3 | >60% |
| Ingredients determined to be non-hazardous | - | Balance |
| | | 100% |

Product name: CALCIUM HYPOCHLORITE, 65% AVAILABLE CHLORINE **SDS No:** DLXPNGEN001679

Issued: 1 October 2015

Version: 1.0

Page: 2 of 9

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. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

Skin contact: For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Immediately 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. Get to a doctor or hospital quickly.

PPE for First Aiders: Wear overalls, chemical goggles 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 nitrile rubber 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.

Notes to physician: Treat symptomatically. Can cause corneal burns.

5. FIRE-FIGHTING MEASURES

Hazchem Code: 1W

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

Specific hazards: Non-combustible, but will support combustion of other materials. Oxidising substance. Corrosive substance.

Fire fighting further advice: Calcium hypochlorite is a powerful oxidising agent and decomposes violently upon heating liberating oxygen and toxic chlorine gas. In case of fire, area must be evacuated and specialist fire fighters called. Only large quantities of water should be used as an extinguishing agent. If excess water is not available DO NOT attempt to extinguish the fire; use available water to prevent the spread of fire to adjacent property. Attending fire fighters should keep upwind if possible and wear full protective equipment including rubber boots and self-contained breathing apparatus. A fire in the vicinity of calcium hypochlorite should be extinguished in the most practical manner but avoid contaminating this material with the fire fighting agent, including water. Decomposes on contact with water evolving toxic chlorine gas. Once fire is extinguished, wash area thoroughly with excess water. Ensure that drains are not blocked with solid material. Maintenance of excess water during cleaning up operation is essential. Combustible material involved in the incident should be removed to a safe open area for controlled burning or for further drenching with water prior to collection for disposal.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Air-supplied masks are recommended to avoid inhalation of toxic material. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust, then immediately spread as a thin layer in uncontaminated, dry, open area to reduce the possibility of local hot spots forming. Collect and seal in properly labelled containers or drums for disposal.

DO NOT return spilled material to original container. DO NOT add small amounts of water to calcium hypochlorite.

Where a spill has occurred in a confined space or an inadequately ventilated enclosure and the material is damp and evolving chlorine, the rate of chlorine evolution can be reduced by covering the thinly spread solid with soda ash.

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 foodstuffs. Store away from incompatible materials described in Section 10. Keep dry - reacts with water, may lead to drum rupture. 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 AND PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by Safe Work Australia.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Use only in well ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Safety Data Sheet



Personal protection equipment: F: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Wear overalls, chemical goggles 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 butyl rubber/leather/natural rubber/neoprene/nitrile rubber/polyethylene/polyvinyl alcohol (PVA)/polyvinyl chloride (PVC)/teflon 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.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid skin and eye contact and inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: White crystalline powder, with a strong chlorine-like odour.

| | |
|---|----------------------------|
| Solubility: | Slightly soluble in water. |
| Specific Gravity: | 2.35 |
| Relative Vapour Density (air=1): | N Av |
| Vapour Pressure (20 °C): | N App |
| Flash Point (°C): | N App |
| Flammability Limits (%): | N Av |
| Autoignition Temperature (°C): | N Av |
| Melting Point/Range (°C): | N Av |
| Boiling Point/Range (°C): | N Av |
| pH: | N Av |
| Viscosity: | N App |

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

10. STABILITY AND REACTIVITY

Reactivity: If material comes in contact with water and acids, toxic gases/vapours may evolve. If involved in a fire, material may increase fire's intensity.

Chemical stability: This material is thermally stable when stored and used as directed.

Hazardous reactions: Reacts with water liberating chlorine.

Conditions to avoid: Elevated temperatures, sources of ignition and contact with reducing agents and combustible materials causes product decomposition.

Incompatible materials: Incompatible with dichloroisocyanuric acid, ammonium nitrate, trichloroisocyanuric acid or any chloroisocyanurate, acids, aluminium, iron, lead, magnesium and zinc. Incompatible with organic materials, combustible materials, reducing agents, ammonia, nitrogen compounds, acidic materials, cyanides, hydrogen peroxide and chlorinated isocyanuric acid (organic bleaching powder)

Hazardous decomposition products: 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 is an irritant to mucous membranes and respiratory tract.

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

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. Exposure to the dust may cause discomfort due to particulate nature.

Acute toxicity

Inhalation: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >20 mg/L

Skin contact: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as a Category 4 Hazard.
Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/Kg

Corrosion/Irritancy: Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes).
Skin: this material has been classified as a Category 1 Hazard (corrosive to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser.
Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): a Category 3 Hazard. Exposure via inhalation may result in respiratory irritation.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 1 Hazard.
Acute toxicity estimate (based on ingredients): <1 mg/L

Long-term aquatic hazard: No information is available to complete an assessment.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

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".

| | |
|-------------------------------------|-------------------------|
| UN No: | 2880 |
| Dangerous Goods Class: | 5.1 Oxidising Substance |
| Packing Group: | II |
| Hazchem Code: | 1W |
| 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 4.2), dangerous when wet substances (Class 4.3), organic peroxides (Class 5.2), radioactive 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.

Safety Data Sheet



MARINE TRANSPORT

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

This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No: 2880
Dangerous Goods Class: 5.1 Oxidising Substance
Packing Group: II

Proper Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED

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 Oxidising Substance
Packing Group: II

Proper Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Residues arising from industrial waste disposal operations

International Convention for the Prevention of Pollution from Ships (MARPOL)

- Annex III - Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

- The Standard for the *Uniform Scheduling of Medicines and Poisons (SUSMP)* established under the *Therapeutic Goods Act (Commonwealth)*.
- 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) on behalf of its client.

Product name: CALCIUM HYPOCHLORITE, 65% AVAILABLE CHLORINE **SDS No:** DLXPNGEN001679

Issued: 1 October 2015

Version: 1.0

Page: 8 of 9

Safety Data Sheet



Reason(s) For Issue: First Issue

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 DuluxGroup (Australia) Pty Ltd and DuluxGroup (New Zealand) 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.

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.