

Section 1: Identification of the Substance/Mixture and of Supplier

Product name: CALCIUM HARDENER / CALCIUM HARDNESS BUILDER
Recommended use: For swimming pools and spas
Supplier: Space Industries Limited
Street Address: 160 Plunket Ave,
 Wiri, Auckland
 New Zealand
Telephone Number: + 64 9 262 3902
Facsimile: + 64 9 262 3948
E-mail: orders@spaceindustries.co.nz
Website: www.spaceindustries.co.nz
Emergency Telephone 0800 764 766 (all hours)
Date of preparation: 25 May 2021

Section 2: Hazards Identification


Signal word: WARNING
ERMA approval code: Water Treatment Chemicals (Subsidiary Hazard) Group Standard HSR002684
Hazard Classification: Substances that are acutely toxic (oral) – Category 4
 Substances that are acutely toxic – Dermal – Category 5
 Substances that are irritating to the skin – Category 2
 Substances that are irritating to the eye – Category 2
 Substances that are harmful to terrestrial vertebrates
Hazard Statements: H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
Precautionary Statements: P102 Keep out of reach of children.
 P103 Read label before use.

Prevention:	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
Response:	P101 If medical advice is needed, have product container or label at hand. P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTRE or doctor/physician if you feel unwell. P321 Specific treatment (see product label). P330 Rinse mouth. P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse.
Disposal:	P501 – Dispose of any left over chemical at an approved hazardous substance collection facility

Section 3: Composition/information on ingredients

Product Description: Off white solid granule, flake or pellet		
Components / CAS Number Calcium Chloride (10043-52-4)	Proportion >74%	Risk Phrases R36 – Irritating to eyes

Section 4: First Aid Measures

Show this Safety Data Sheet to a Doctor

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact:	Remove/take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Ingestion:	Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If symptoms develop, seek medical attention.
Notes to physician:	Treat symptomatically.
For advice, contact the Poisons Information Centre 0800 764 766 or a doctor	

Section 5: Fire Fighting Measures

Specific Hazards:	Non-combustible solid. Material does not burn. Containers may explode upon heating. Avoid generating dust. Incompatible with oxidizing agents, calcium oxide, boron oxide, methyl vinyl ether, bromine trifluoride and sources of ignition. Reacts exothermically with water to liberate heat. Hygroscopic. Fire or heat may produce irritating, poisonous and/or corrosive gases.
Suitable Extinguishing Media:	In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions.
Fire-fighting advice:	Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment. Product is a non-flammable solid.

Section 6: Accidental Release Measures

Emergency Procedures	Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation. Stop leak if safe to do so. Avoid generating dust. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use spark-proof tools and equipment. Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled chemical waste container and hold for safe disposal. Minor spills and small residuals can be flushed down the drain with plenty of water.
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Section 7: Handling and Storage

Handling:	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment.
Storage:	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials including oxidizing agents, calcium oxide, boron oxide, methyl vinyl ether, bromine trifluoride and ignition sources. Protect from moisture. Hygroscopic.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:	No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH).
Engineering Control Measures:	Use in a well ventilated area. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask.

Keep containers closed when not in use.

Personal Protective Equipment:

.As product can cause eye irritation, safety glasses or goggles must be worn.
The use of rubber gloves is recommended.
Wash contaminated clothing and other protective equipment before storage or re-use.

Section 9: Physical and Chemical Properties

Physical state: Flakes or granules
Colour: White to off white
Odour: Odourless
Specific Gravity/Bulk 1.86 (water=1)
Boiling point/ melting point: 782°C
Vapour pressure: 0.009

Section 10: Stability and Reactivity

Stability: Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Conditions to avoid: Avoid excessive heat, generating dust, direct sunlight, moisture, static charges and high temperatures.

Incompatible materials: Calcium oxide, boron oxide, methyl vinyl ether, bromine trifluoride and sources of ignition.

Decomposition: Fire or heat may produce irritating, poisonous and/or corrosive gases. Reacts exothermically with water liberating heat.

Hazardous reactions: A violent polymerization occurs if calcium chloride is mixed with methyl vinyl ether.

Section 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:

Ingestion: Moderately toxic by ingestion
Dose Descriptor: LD50
Value: 750 mg/kg bw
Oral Route
SPECIES: Rabbit
ENDPOINT: LD50
VALUE: 500-1000 mg/kg
REFERENCE SOURCE: [IUCLID]

Skin contact: Dermal Route
SPECIES: Rat
ENDPOINT: LD50
VALUE: 2630 mg/kg
REFERENCE SOURCE: Daltrade Ltd London [IUCLID]

Eye contact: Irritating to the eye.

Inhalation: Inhalation of product dust may cause irritation to the respiratory system.

Section 12: Ecological Information

Environmental fate: Avoid contaminating waterways.

Persistence and degradation: This material is not biodegradable.

Section 13: Disposal Considerations

Refer to Waste Management Authority.
Dispose of material through a licensed waste contractor.
Flush to drain with large quantities of water.

Section 14: Transport Information

Road and Rail Transport: Not classified as a Dangerous Good according to NZS 5433:1999 Transport of Dangerous Goods on Land.

UN No:

Class-primary

Packing Group:

Proper Shipping Name:

Hazchem Code:

Section 15: Regulatory Information

Hazard Classification: HSR 2684 Water Treatment Chemicals (Subsidiary Hazard) Group Standard 2020

Section 16: Other Information

.Issue Date: 25 May 2021

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