SAFETY DATA SHEET

PRODUCT NAME:	Pool Treat Hardness

Issue Date: 31 October 2025

SECTION 1: IDENTIFICATION

Product Name: Pool Treat Hardness
Other Names: Calcium Chloride, Dihydrate
Product Code: CCC1000, PH1, PH2.5, PH5, PH25, CCC25-FG, CCC25-IG
Uses: Pool water hardness, desiccant, binder, coagulant, fire retardant, freezing point depressant, fungicide, preservative, sequestrant.
Supplier: HamChem Hamilton Chemicals Ltd, 75 Ruffell Rd, Hamilton
Phone: 079744971 Web: www.hamchem.nz Email: info@hamchem.nz

- **In emergency dial 111, and then ask for Fire, Ambulance or Police as necessary.**
- **In case of poisoning phone National Poisons Centre – 0800 764 766**

SECTION 2: HAZARD IDENTIFICATION

GHS Classifications
Acute Toxicity (Oral) – Category 4
Skin Irritation – Category 2
Eye Irritation – Category 2

Signal Word: Warning

Hazard Statements
H302 – Harmful if swallowed
H315 – Causes skin irritation
H319 – Causes serious eye irritation

Prevention
P270 – Do not eat, drink or smoke when using this product
P280 – Wear protective gloves & eye/face protection
P264 – Wash hands & exposed skin thoroughly after handling

Response
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing
P337 + P313 – If eye irritation persists: Get medical advice/attention
P301+P312 – IF SWALLOWED: Call a POISON CENTRE or Doctor/Physician immediately.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P332+P313 – If skin irritation occurs: Get medical advice/attention
P330 – Rinse mouth
P362 – Take off contaminated clothing and wash before reuse

Disposal
P501 – Dispose of contents/container in accordance with local regulations

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

Chemical Entity	CAS No.	Proportion (%)
Calcium Chloride	10043-52-4	>74

SECTION 4: FIRST AID MEASURES

Swallowed: IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. For advice contact a Poisons Centre or a Doctor. Urgent hospital treatment is likely to be needed. In the meantime, a qualified First Aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksite or surroundings, send the patient to hospital together with a copy of the SDS.

Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise: INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head down position, if possible) to maintain open airway and prevent aspiration. (Note: wear a protective glove when inducing vomiting by mechanical means)

Eye: If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin: If skin or hair contact occurs: Flush skin/hair with running water (and soap if available). Seek medical attention in event of irritation.

Inhaled: If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other methods are usually unnecessary.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media: There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

Fire fighting: Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area.

Fire/explosion hazard: Non-combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of; hydrogen chloride and metal oxides. May emit poisonous fumes. May emit corrosive fumes.

Fire incompatibility: None known.

SECTION 6: RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures – see Exposure Controls & Personal Protection section of this SDS

Environmental precautions – see Ecological Information section of this SDS.

Minor Spills – Remove all ignition sources. Clean up spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

Major Spills – Moderate Hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing.

SECTION 7: HANDLING & STORAGE

Precautions for Safe Handling – Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in well-ventilated area. Prevent concentration in hollows and sumps.

Other Information – Material is hygroscopic, i.e. absorbs moisture from the air. Keep containers well sealed in storage. Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers.

Suitable Container – DO NOT use aluminum or galvanised containers. Use polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.

Storage Incompatibility – Inorganic alkaline earth metal derivative. Derivative of very electropositive metal. Calcium Chloride (and its hydrates) are incompatible with: Boric Acid, Calcium Oxide, Bromine Trifluoride, 2-Furan and Percarboxylic Acid. May produce explosive hydrogen gas on contact with zinc. Catalyses exothermic polymerization of methyl vinyl ether. Will produce heat on contact with water. Will attack metals.

SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure standards: No value assigned for this specific material by Worksafe NZ. However, Workplace Exposure Standard for particulates:

WES-TWA 0.1 mg/m³

Engineering Controls: Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls - which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment.

Hand/Skin protection: The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Suitability and durability of glove type is dependent on usage. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present: polychloroprene, nitrile rubber, butyl rubber.

Eye/Face protection: Safety glasses with side shields. Chemical Goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Other protection: Overalls, PVC apron, Barrier cream

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance:	White (very hygroscopic) powder/flakes/prill
Odour:	Odourless
Specific Gravity:	1.85
Solubility in water:	Soluble in water to 1000g/L @ 20ºc
Flash point:	Not applicable
Flammability limits:	Not applicable
Boiling point:	Not available
Melting point:	176ºc
pH:	4.5-6.5 (10% solution)

SECTION 10: STABILITY & REACTIVITY

Stability: Product is stable under normal conditions of use and storage.

The substance decomposes on heating at high temperature and on burning producing toxic and corrosive fumes. Hygroscopic. Dissolves in water with the liberation of heat. The solution in water is a weak base. Slowly corrodes metals. Attacks zinc in presence of water, forming highly flammable hydrogen gas.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity data: Acute Oral LD50 (ingestion, rat) 1000mg/kg

ACUTE HEALTH EFFECTS

Swallowed: Considered an unlikely route of entry in commercial/industrial environments. Small amounts or low dose rates are regarded as practically non-harmful. The material is highly discomforting and may be corrosive if swallowed. Ingestion may result in nausea, abdominal irritation, pain and vomiting.

Eye: The dust may be highly discomforting to the eyes and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Skin: The material is moderately discomforting to the skin and may cause blisters or burns if exposure is prolonged. Not readily absorbed through the skin. Open cuts, abraded or irritated skin should not be exposed to this material. The material may accentuate any pre-existing skin condition. Solution of material in moisture on the skin, or perspiration, may increase irritant effects. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, production of vesicles, scaling and thickening of the skin.

Inhaled: The dust may be discomforting to the upper respiratory tract if inhaled.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by inhalation of generated dust and skin contact with the material. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate: Based on available information for Calcium Chloride anhydrous, this material will not biodegrade or bioaccumulate.

HamChem Ltd, 75 Ruffell Rd, Hamilton, New Zealand. Phone 07 974 4971 Email - info@hamchem.nz Web: www.hamchem.nz

Environmental Toxicity: For Calcium Chloride Anhydrous: 48 hour EC50 Daphnia magna (water flea) : 52 mg/L. 96 hour LC50 Lepomis machrochirus (bluegill) : > 5000 mg/L [static].

SECTION 13: DISPOSAL CONSIDERATIONS

Recycle wherever possible. Whatever cannot be saved for recovery or recycling should be sent to an approved waste disposal contractor for disposal in an approved waste facility. Normally product is suitable for disposal at an approved landfill site. Processing, use or contamination of this product may change the waste management options. Care should be taken to ensure compliance with national and local regulations. This product is NOT for disposal via municipal sewers, drains, natural streams or rivers.

SECTION 14: TRANSPORT INFORMATION

Not classified as a Dangerous Good according to NZS 5433 Transport of Dangerous Goods on Land.

SECTION 15: REGULATORY INFORMATION

HSNO Classifications: 6.1D, 6.3A, 6.4A
EPA Approval: HSR002503 – Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

SECTION 16: OTHER INFORMATION

End of SDS.

HamChem Ltd, 75 Ruffell Rd, Hamilton, New Zealand. Phone 07 974 4971 Email - info@hamchem.nz Web: www.hamchem.nz