



SAFETY DATA SHEET

LIQUID CALCIUM

Issue Date: 22/11/22
Issued by: BOND CHEMICALS Pty Ltd

1. IDENTIFICATION

GHS Product Identifier
LIQUID CALCIUM

Synonyms
Liquid Calcium Chloride, Calcium Chloride Aqueous Solution.

Company Name
BOND CHEMICALS Pty Ltd (ABN 491 505 672 67)

Address
23 Otterington Grove, Ivanhoe East
Victoria 3079. Australia

Telephone
0429 625 750

Emergency Contact Name
Manufacturing Manager, Bond Chemicals Pty Ltd

E-mail Address
maxbradbury6@bigpond.com

Recommended use of the chemical and restrictions on use
For increasing the hardness of Swimming pool and Spa water.
(If hardness is too low, calcium may leach from concrete and tile mortar. Low hardness may also promote metal corrosion)

2. HAZARD IDENTIFICATION

GHS classification of substance/mixture

This product is **NOT** scheduled as a Poison.

NOT classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail; 7.7 edition.*

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)* including Work, Health and Safety Regulations, Australia (HCIS).

Eye Damage/Irritation; Category 2A

Signal Word (s)

WARNING

Hazard Statement (s)

H319 Causes serious eye irritation

H315 Causes skin Irritation

Precautionary Statement (s)

Prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection

P264 Wash 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

Pictogram (s)



Precautionary Statement - Storage

There are no precautionary storage phrases assigned

Precautionary Statement – Disposal

Dispose of contents/container in accord with State, Territorial or Commonwealth regulations. Dispose of triple rinsed empty containers to plastics recycle system, or general waste disposal system.

Other Information

In Australia and New Zealand, the POISONS CENTRE is the Poisons Information Centre; Australia: Telephone 13 11 26; New Zealand Telephone 0800 764 766

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Toxicity Data

Name	CAS	Proportion
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Water	7732-18-5	30-40 %
Calcium Chloride	10043-52-4	30-40 %

4. FIRST – AID MEASURES

Inhalation

If inhalation of vapour, mist or spray occurs and adverse effects result, move person to fresh air and keep comfortable for breathing. Call POISON CENTRE or doctor/physician if patient feels unwell.

Ingestion

If swallowed, rinse mouth. Contact a POISON CENTRE or doctor/physician if patient feels unwell.

Skin

If skin and/or hair contact occurs, remove contaminated clothing and foot wear and flush skin and hair with running water for 15 minutes. If skin irritation occurs, seek medical attention immediately. Wash contaminated clothing thoroughly before re-use.

Eye

If in eyes, hold eyelids apart, and flush the eye continuously with running water Remove contact lenses, if fitted, before flushing with water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor, or for at least 15 minutes. Promptly contact a Doctor and/or transport to an emergency hospital.

Advice to Doctor

Treat symptomatically.

Indication of immediate medical attention and special treatment if necessary

For advice, contact Poisons Information Centre, Phone Australia 13 11 26; New Zealand: 0800 764 766 or a Doctor.

5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media

The material does not burn.

Use extinguishing media appropriate for the source of the fire.

Specific Methods

Remove sealed containers from the path of the fire if safe to do so. If not, keep fire exposed containers cool with water spray. Operate upwind of the containers and out of the path of the fire.

Specific Hazards Arising from the Chemical

None expected as the product is neither flammable or combustible. Sealed containers exposed to heat of a fire may rupture releasing a solution as a spray, and hydrogen chloride and calcium oxide from the decomposition of the product.

Precautions in connection with Fire

Firefighters should wear full protective equipment and other equipment such as self-contained breathing apparatus appropriate to the major source of fire and the potential release of hydrogen chloride gas if product containers rupture.

6. ACCIDENTAL RELEASE MEASURES

Methods and Materials for Containment and Cleaning Up

Remove unnecessary people from spill area. Wear appropriate protective clothing and contain spill with soil, sand or vermiculite to prevent entry into drains, sewers, water courses and water storages. Do NOT use sawdust or other cellulose based materials. Collect spilled material if possible, otherwise soak up in an inert absorbent material and collect in labelled containers for disposal. Wash residual materials from spill scene/area with plenty of water.

Environmental Precautions

DO NOT allow entry into water courses, drains or sewers.
Advise local authorities if spillage is likely to enter or has entered water courses or drains.

7. STORAGE AND HANDLING

Precautions for Safe Handling

Do not get in eyes, on skin or on clothing. Do not breathe vapour, mist or gas. Product will irritate eyes, and skin. Discard contaminated footwear. Use clean containers for dispensing. Mix with water only.

Conditions for safe storage, including any incompatibilities

Store under cover in a dry, clean, cool, well ventilated place. Store in upright containers. Ensure that container is closed when not in use.
Hydrogen gas may be evolved if solution contacts Zinc metal.

Storage Regulations

Store in accordance with Dangerous Goods (Storage and Handling) regulations of your jurisdiction.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No data available.

Respiratory Protection

Not required under normal conditions of use.

Eye Protection

Wear approved chemical goggles. In the workplace environment eye protection complying with AS/NZS 1337* should be worn to protect against splashes and droplets of the product from entering the eye. Guidance to recommended practices for eye protection in the industrial environment is provided in AS/NZS 1336*.

Body Protection

Wear protective gloves, long sleeves, foot and eye protection to minimize exposure to the chemical.

Remove contaminated clothing promptly. Wash contaminated clothing before re-use.

Hygiene Measures

It is good practice, both in the recreational area and the workplace, to avoid eye and skin contact, and avoid breathing vapour or mists of this product.

In addition it is good practice to wash face, hands and arms before eating, drinking or smoking after using this product or at the end of a work period.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	CLEAR LIQUID	Solubility (Water)	SOLUBLE
Odour	Nil	Specific Gravity	1.3-1.34 at 20 deg C
Boiling Point	Not determined		
pH	Neutral	Vapour Pressure	No Data Available
Flash Point	NOT APPLICABLE	Flammability	NOT FLAMMABLE
Auto Ignition Temp	NOT APPLICABLE	Flammable Limit Lower	NOT APPLICABLE
Flammable Limit Upper	NOT APPLICABLE		

10. STABILITY AND REACTIVITY

Reactivity

Flammable Hydrogen gas may be released if solution contacts Zinc.

Chemical Stability

Stable under normal conditions.

Conditions to avoid

None known.

Incompatible Materials

Flammable Hydrogen gas may be released if solution contacts Zinc.

Hazardous Decomposition Products

Hydrogen Chloride gas evolved under fire conditions.

Hazardous Polymerization

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Component Toxicity Data:

Component	LD ₅₀ Oral	LD ₅₀ Dermal	LC ₅₀ Inhalation
Calcium Chloride 10043-52-4	1000 mg/kg (Rat)	2630 mg/kg (Rat)	Nil

Ingestion

Low Toxicity if swallowed. Small amounts are unlikely to cause injury. Swallowing large amounts may cause gastrointestinal irritation or ulceration.

Inhalation

Inhalation of vapours and mists of product are unlikely. Mists may cause irritation of mucous membranes of respiratory tract.

Skin

Brief contact is non-irritating to the skin. Prolonged contact may cause skin irritation or even burns.

Not corrosive to the skin according to DOT regulations.

Eye

May cause severe irritation and eye burns. May cause slight corneal injury. Effects may be slow to heal.

Chronic Effects

Prolonged or frequent skin contact/exposure may cause dermatitis or mucosal membrane problems.

12. ECOLOGICAL INFORMATION

Ecological information

Material is practically non-toxic to aquatic organisms on an acute basis.

Fresh water fish toxicity: *Lepomis macrochirus* 8350-10650 mg/l

Invertebrate toxicity: Water flea *Daphnia magna* LC50: 759-3005 mg/l

Known Harmful Effects on the Environment

Unknown.

Environmental Protection

Avoid contamination of watercourse and water storages, drains, and/or sewers.

Advise local authorities if spill of product is likely to or has entered watercourses, drains and/or sewers.

13. DISPOSAL CONSIDERATION

Waste Disposal

Dispose of waste materials in accordance with relevant state, territorial or Commonwealth waste disposal regulations.

Container Disposal

Rinse 'empty' containers with water. Return rinsed containers to plastic recycle system or include in general waste disposal system. In recreational usage rinse containers with pool or spa water before disposal. DO NOT use "empty" or rinsed containers for storage or packaging of other liquids or foodstuffs.

14. TRANSPORT INFORMATION

Transport Information

Product is **NOT** a DANGEROUS GOOD (DG), for transport by road, rail, sea or air. Road and rail should be in accordance with the current edition of the ADG code* and statutory regulations.

U.N. Number Nil

UN proper shipping name

CALCIUM CHLORIDE SOLUTION

Transport hazard class (es)

N.A.

Packing Group N.A.

Hazchem Code N.A.

IERG Number N.A.

15. REGULATION INFORMATION

Regulatory information

Product is **NOT** classified as a DANGEROUS GOOD (see above).

Product is classified as a hazardous chemical – SERIOUS EYE DAMAGE/IRRITATION, according to the Globally Harmonised System for Classification and Labelling of Hazardous Chemicals.*

Poisons Schedule

NOT scheduled.

Packaging and Labelling

Product label as compiled by ADG 7.7 and GHS 3rd ed.

Australia (ACIS)

Principal active components of this product are included in the Australian Inventory of Chemical Substances (AICS)*.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

Safety Data Sheet (SDS) issued on 29th Nov, 2021.

SDS is prepared in compliance with the National Code of Practice for Preparation of SDS*.

References

- *GHS = Globally Harmonised System for the classification and labelling Hazardous Chemicals. United Nations Publication.
- *ADG = Australian Dangerous Goods Code 7.7 Edition 2020
- *NES = National Exposure Standard = Exposure Standards for Atmospheric Contaminants in the Occupational Environment in Exposure Standard section of HSIS, as amended.
- *HCIS = Hazardous Chemicals Information System, maintained by SWA
- *SWA = Safe Work Australia
- *AS = Australian Standard
- *NZS = New Zealand Standard
- *AS/NZS 1716: Respiratory protective devices.
- *AS/NZS 1715: Selection, use and maintenance of respiratory protective devices
- *AS/NZS 1337: Eye protectors for Industrial Applications
- *AS/NZS 1336: Recommended practices for eye protection in the Industrial Environment
- *AS/NZS 4501: Protective Clothing – Protection against Chemicals
- *National Poisons Standard (Standard for the Uniform Scheduling of Medicines and Poisons,) Therapeutics Goods Authority. Refer to Commlaw website.
- *AICS = Australian Inventory of Chemical Substances maintained by National Industrial Chemicals Notification and Assessment Scheme.
- *National Model Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals, Safe Work Australia.

Contact Person/Point

BUSINESS HOURS: Product Information Officer, 0429 625 750

This SDS summarises our best knowledge of the health and safety hazard information of this product and how to safely handle and use the product. Each user must review this SDS in the context of how

the product will be handled and used. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.
As far as lawfully possible, Bond Chemicals Pty Ltd accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

END OF SDS