

**Material Safety Datasheet**

CAS No 10043524
Date Issued: 2014/06/09
CALCIUM CHLORIDE

Company Details

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1. Product and Company Identification

<u>Trade / Commercial Name</u>	CALCIUM CHLORIDE		
<u>Chemical Name</u>	Calcium Chloride		
<u>Formula</u>	CaCl ₂ . H ₂ O		
<u>Chemical Family</u>	MAS		
<u>Synonyms</u>	Calcium chloride anhydrous		
<u>Un No</u>		<u>Hazchem Code</u>	1s
<u>ERG No</u>	171	<u>EAC</u>	47

2. Hazards Identification

If inhaled, could be harmful.
Fire could produce irritating or poisonous gases.
Runoff from fire-control or dilution water could cause pollution.

3. Composition

<u>Hazardous Components</u>	Calcium Chloride 72 - 95%
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4. First Aid Measures

<u>First Aid Skin</u>	Immediately remove contaminated clothing, including shoes. Flush body with plenty of water for at least 15 minutes.
<u>First Aid Eyes</u>	Flush eyes with water for 15 minutes. Hold eyelids open while washing.
<u>First Aid Ingested</u>	Give large amounts of water.
<u>First Aid Inhalation</u>	Immediately remove to fresh air.

5. Fire Fighting Measures

SMALL FIRES: Water only, no dry chemicals, CO₂ or Halon.
LARGE FIRES: Flood fire area with water.
Do not move cargo or vehicle if cargo has been exposed to heat.
Cool containers that are exposed to flames with water from the side until well after the fire is out.

Stay away from ends of tanks.

Keep unnecessary people away; isolate hazard area and deny entry.

Stay upwind; keep out of low areas.

Self-contained breathing apparatus (SCBA) and structural firefighter's protective clothing will provide limited protection.

6. Accidental Release Measures

Breathing apparatus and protective gloves

Dilute (substance may be washed to drain with a lot of water)

PRECAUTIONS:

Restrict access to area.

Provide adequate protective equipment and ventilation. Remove sources of heat and flame.

Notify occupational and environmental authorities.

SPILL OR LEAK:

Keep combustibles (wood, paper, oil, etc) away from hazard area.

Do not touch spilled material. Stop leak if you can do it without risk.

Use water spray to reduce vapours.

SMALL SPILLS:

Flush area with flooding amounts of water.

7. Handling And Storage

Fire separation of at least 5M or 4Hr fire resistant wall from the following classes is recommended.

Organic Peroxides Poison

Corrosives

Storage in the same room or space is prohibited with the following classes:

The rooms or spaces should be at least 10M apart.

Explosives Flammable Gases

Poisonous Gases Flammable Liquids

Flammable Solids Spontaneously Combustibles

Dangerous When Wet Radioactive

8. Exposure Controls/Personal Protection

Occupational Exposure Limits Ensure adequate ventilation.

Exposure limits not available.

Controls

The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure.

The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release.

Have a safety shower/eye wash fountain readily available in the immediate work area

Personal Protection

If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment, including chemical safety goggles & face shield, boots, impervious gloves, coveralls, & respiratory protection.

Have appropriate equipment available for use in emergencies.

9. Physical & Chemical Properties

Colourless, white to off-white crystals or clear, colourless water solution.

Crystals will absorb moisture from the air forming a concentrated liquid.

Specific gravity: 2.1500 at 20 C

Density : 2.1520 at 25 C

Boiling point: >1600 C

Melting point: 772 C

Decomposition temperature: >1600 C

Odour: none

10. Stability And Reactivity

Conditions to Avoid

Keep containers dry and tightly closed to avoid moisture, absorption and contamination.

Hygroscopic.

Incompatible Materials

Boric acid and Calcium oxide, Bromine trifluoride, 2 Furan, Percarboxylic acid.

Other

11. Toxicological Information

Short term Health Effects:

Dust may cause burning, irritation of the nose, mouth and throat, nose bleeds and breakdown of nasal tissue. (Contact with solid on dry skin may cause severe irritation).

Contact with wet skin or concentrated solutions can cause more severe irritation and burns.

May cause irritation of the mouth, throat and stomach, nausea and vomiting.

May cause irritation, burning and some damage to the surface of the eye.

Long Term Health Effects: No information available.

Acute toxicity: LD50/oral/ rat = 1000 - 4000 mg/kg

Mutagenic:

Tumerigenic:

12. Ecological Information

No ecological problems are expected when the product is handled and used with due care.

13. Disposal Considerations

Disposal Method Product

There are no uniform EC regulations for the disposal of chemicals or residues.

Chemical residues generally count as special waste.

We recommend that you contact the authorities in charge or approved

waste disposal companies which will advise you on how to dispose of special waste.

Disposal Method Packaging

Disposal in accordance with local legal provisions.

14. Transport Information

		<u>Hazchem Code</u>	1s
<u>ERG No</u>	171	<u>EAC</u>	47
<u>IMDG-Shipping Name</u>	NOT CONTROLLED SUBSTANCE		

IMDG-Packaging Group

II

<u>Marine Pollutant</u>	Yes
<u>Class</u>	Class: 9 Miscellaneous Group: III
<u>Subsidiary Risks</u>	None

15. Regulatory Information

<u>EEC Hazard Classification</u>	9
<u>Risk Phases</u>	Harmful by inhalation and if swallowed
<u>Safety Phases</u>	Avoid contact with eyes
<u>National Legislation</u>	

16. Other Information

Reason for Alteration: General update.

The information contained herein is based on the present state of our knowledge.
It characterizes the product with regard to the appropriate safety precautions.
It does not represent a guarantee of the properness of the product.

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All information is given in good faith but without guarantee in respect of accuracy & no responsibility is accepted for errors or omissions or the consequences thereof.