

Aquapac Pty Ltd

ABN 36 114 118 311

Water treatment & Specialty chemicals

MATERIAL SAFETY DATA SHEET

Product: Calcium Fluoride

Company Details

Supplier: Aquapac Pty Ltd
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Castle Hill NSW 1765
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Emergency Telephone No.:

Business Hours: 0422 600 701

After Hours: 0422 600 701 (mobile), Bill Say, Manager - NSW

IDENTIFICATION

U.N. Number: None allocated
Hazchem: None allocated
EPG: None allocated
Class: None allocated
Poisons Schedule: S6
Packaging Group: None allocated

Classified as hazardous according to criteria of NOHSC

Ingredients

Chemical Entity	CAS No.	Proportion
Calcium Fluoride	7789-75-5	97-99%
Silica	7631-86-9	1-1.5%

Other Names

Fluorspar

Uses

Principal source of fluorine and its compounds by way of hydrogen fluoride, flux in open hearth steel furnaces and in metal smelting, in ceramics, for synthetic cryolite, in carbon electrodes, emery wheels, electric arc welders, paint pigment and laboratory reagent.

Physical Description / Properties

Appearance: Light grey to brownish fine powder.
Flash point: N/A
Boiling point (°C): 2500 °C
Melting Point (°C): 1350-1402 °C
Molecular weight: 78.08
Specific Gravity: 3.18
Hardness (Mohs): 4
Solubility in Water (g/L): Insoluble

Other Properties

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Odour: characteristic
Solubility: Soluble in ammonium salts

HEALTH HAZARD INFORMATION

Health Effects

Symptoms that may arise if the product is mishandled are:

Acute

Swallowed Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts of fluoride may include salivation, nausea, vomiting, abdominal pain, fever, laboured breathing. Exposure to fluoride compounds can result in systemic toxic effects on the heart, liver and kidneys. It may also deplete calcium levels in the body leading to hypocalcemia and death. May cause bone structural abnormalities.

Eye Irritating to eyes.

Skin Irritating to skin.

Inhaled harmful by irritation. Irritating to respiratory system.

Chronic Effects

This material contains 1 to 1.5% silica as an impurity. Chronic inhalation exposure to crystalline silica may result in serious adverse health effects particularly if the silica is respirable size. Crystalline silica has been shown to induce lung cancer in laboratory animals and there is limited evidence that it may cause lung cancer in humans.

As with any chemical - ingestion, inhalation, and prolonged or repeated skin contact should be avoided by good occupational work practice.

First Aid

Swallowed Rinse mouth thoroughly with water immediately. If swallowed do NOT induce vomiting. Urgent hospital treatment is likely to be needed.

Eye Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.

Skin Immediately wash contaminated skin with plenty of water and then wash with soap and water. Remove contaminated clothing and wash before re-use. Seek medical advice.

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Inhalation Remove victim from exposure - avoid becoming a casualty. Seek medical advice.

Poison Information Centres in each State capital city can provide additional assistance.

Advice to Doctor

Consult Poisons Information Centre.

PRECAUTIONS FOR USE

Exposure Standards (for atmospheric contaminants in the occupational environment)

	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Calcium fluoride		2.5		

Engineering Controls

Maintain concentration below recommended exposure limit. Use in a well-ventilated area. Avoid generating and inhaling mists and aerosols. Keep containers closed when not in use. If risk of overexposure exists, wear SAA approved respirator to comply with AS 1716, ensuring correct fit to obtain adequate protection.

Personal Protection

Eyes: The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin: Rubber or PVC gloves, overalls or PVC suit, safety or rubber boots

Respiratory: If dust is generated the use of a respirator to comply with AS 1716.

Avoid contact with eyes and skin. Avoid prolonged or repeated exposure. Always wash hands before smoking, eating, drinking or using the toilet.

Flammability

Not combustible material.

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SAFE HANDLING INFORMATION

Storage and Transport

Store in a cool and dry place. Prevent direct sunlight. Keep product tightly closed. Keep away from incompatible materials and all other sources of heat, sparks and open flame. Handle with appropriate personal protective equipment. Check regularly for spills and leaks.

Spills

Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination including breathing apparatus.

Contain do not allow spill material to enter the environment. Vacuum or mop up material. Place into suitable labelled containers and hold for waste disposal. Wash area down with excess water once removed.

Disposal

Refer to State and Land Management Authority and relevant Environmental Protection Authority.

Fire / Explosion Hazards

Conditions to avoid:

High temperature: Fire or heat May produce irritating, poisonous and /or corrosive gases. Containers may explode when heated.

Materials to avoid:

Strong oxidisers. Reacts violently with strong oxidisers.

Hazardous Decomposition Products:

May produce irritating, poisonous and /or corrosive gases

Extinguishing Media:

Fire fighters should wear full protective clothing including self-contained breathing apparatus. In case of fire use water, foam, carbon dioxide, dry powder.

OTHER INFORMATION

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Toxicity

Toxicology:

Oral LD50 (rat): 4250 mg/Kg.

Risk Statement:

R20/22 Harmful by inhalation and if swallowed.

Safety Statement:

R36/37/38 Irritating to eyes, respiratory system and skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and Seek medical advice.

Hazard Category:

Harmful, Irritant

Company Disclaimer

All information contained in this data sheet is as accurate and up-to-date as possible. Since Aquapac Pty Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application.

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