

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

Product Identifiers

Product Name: Calcium Chloride, Dihydrate, ACS Reagent
Product Number: C135

Other means of identification

Synonyms: Sal Ammoniac, Ammonium Muriate, Salmiac

Recommended Use For Research/Laboratory Use ONLY

Restrictions on Use Products manufactured by PhytoTechnology Laboratories and supplied by Austratec Pty Ltd are intended for research and laboratory use ONLY. Products are NOT to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

Details of Importer/Supplier

Company: Austratec Pty Ltd, Factory 12/49 Corporate Blvd, Bayswater VIC 3153, AUSTRALIA
Telephone: +61 3 9729 4528
Fax: +61 3 9729 4578
Website: www.austratec.com.au

Emergency phone number 13 11 26 (24 hour – Poisons Information Centre)

2. HAZARD(S) IDENTIFICATION

GHS Classification Serious Eye Damage/Eye Irritation (Category 2/2A)

GHS Label elements, including precautionary statements

Pictogram:  Signal Word: **WARNING**

Hazard Statement(s) H319 – Causes serious eye irritation.

Precautionary statement(s)

Prevention: P264 – Wash hands thoroughly after handling.
P280 – Wear protective gloves/protective clothing/eye protection.

Response: P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water. Remove contact lenses if present and easy to do.
P337 + P313 – If eye irritation persists: Get medical advice/attention.

Storage: None

Disposal: None

3. COMPOSITION AND INFORMATION ON INGREDIENTS

CAS Number: 10035-04-8 EC Number: 233-140-8
Formula: $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ Molecular Weight: 147.02 g/mol

INGREDIENT	CAS NUMBER	PURITY	HAZARDOUS
Calcium Chloride, Dihydrate	10035-04-8	>99%	No exposure limits established by OSHA or ACGIH

4. FIRST AID MEASURES

Description of first aid measures

General advice: Consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

Ingestion: MAY CAUSE IRRITATION IF SWALLOWED. If swallowed, wash mouth out with water. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: MAY CAUSE IRRITATION TO RESPIRATORY TRACT. Safely remove person to fresh air. If not breathing, begin cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Seek medical attention.

Eye contact: DIRECT CONTACT MAY CAUSE IRRITATION, REDNESS, TEARING, OR BLURRED VISION. Flush eye out immediately with water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention if irritation persists.

Skin contact: MAY CAUSE IRRITATION, REDDENING, ITCHING OR INFLAMATION. Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Seek medical attention.

Most important symptoms and effects, both acute and delayed

See section 2 and/or section 11

Recommendation for immediate medical attention and special treatment needed

No data available

5. FIRE FIGHTING MEASURES

Suitable extinguishing media Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

Specific hazards arising from the chemical

Hazardous combustion products: May emit toxic fumes under fire conditions.

Toxic gases produced: No data available.

Special protective equipment and precaution for firefighters In the event of fire, wear full protective clothing and NIOSH (US) or EN145 (EU) approved self contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protection equipment (PPE) recommended in Section 8. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup

Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place in a dry container and cover. Remove from area for safe disposal (see section 13). Flush spill area with water. Do not let product enter drain.

7. HANDLING AND STORAGE**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Provide appropriate exhaust ventilation where dust is formed. Wash thoroughly after use.

Conditions for safe storage

Keep in a tightly closed container and store in a cool, dry and well ventilated area.

Recommended Storage Temperature

Room Temperature.

Incompatibilities

Strong acids, strong bases, strong oxidizing agents.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**Exposure control measures**

Workplace Exposure Standards (TWA;STEL): No data available

OSHA's permissible exposure limits (PEL's): No data available

ACGIH threshold limit values (TLV's): No data available

Engineering controls

Handle in accordance to general industrial hygiene and chemical safety practice.

Personal protective equipment (PPE)

Eye Face Protection: Chemical safety shield, glasses or goggles approved under NIOSH (US) or EN166 (EU). Have eye washing facilities readily available where eye contact can occur.

Skin Protection: Suitable protective gloves.

Body Protection: Lab coat or protective chemical suit. Protective equipment must be selected in accordance to the amount of dangerous substance within the specific workplace.

Respiratory Protection: Use an appropriate dust mask. Use N95 (US) or type P1 (EN143) dust mask where dust level is a nuisance. Appropriate respirator approved under NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance White to off-white powder.

Odour Odorless.

Odour threshold No data available.

pH (147 g/L) 5.0 – 8.0 @ 20 °C

Melting point 175°C.

Initial boiling point/boiling range No data available

Flash point (closed cup) No data available.

Evaporation rate No data available.

Flammability (solid, gas) No data available.

Flammable limits (upper %) No data available.

Flammable limits (lower %)	No data available.
Vapour pressure	0.01 hPa (0.01 mmHg) at 20°C.
Vapour density	No data available.
Relative density	1.850 g/cm ³ .
Solubility	Soluble in water.
Partition coefficient (n-octanol/water)	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

10. STABILITY AND REACTIVITY

Reactivity	No data available.
Chemical stability	Stable under normal conditions of use and recommended storage conditions.
Possibility of hazardous reactions	No data available.
Conditions to avoid	Moist air,
Incompatible materials	Strong acids, Borane/Boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Bromine trifluoride
Hazardous decomposition products	No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD ₅₀ (Oral, Rat)(mg/Kg):	No data available
	LD ₅₀ (Oral, Mouse)(mg/Kg):	No data available
	LD ₅₀ (IP, Mouse)(mg/Kg):	20,500
Skin corrosion/irritation	No data available	
Serious eye damage/irritation	No data available	
Respiratory or skin sensitisation	No data available	
Germ cell mutagenicity	No data available	
Carcinogenicity	NTP:	No
	IARC:	No
	Z List:	No
	OSHA Reg:	No
Reproductive toxicity	No data available.	
Specific target organ toxicity (STOT)	Single Exposure:	No data available
	Repeated Exposure:	No data available
Aspiration hazard	No data available	
Target organs	No data available	
Medical conditions aggravated by exposure	No data available	
Routes of entry	Ingestion, skin and eye contact.	

Symptoms associated with overexposure Irritation, itching, gastrointestinal upset, nausea, blurred vision.

NIOSH/RTECS No. EV9810000.

The toxicological properties of this product have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Disposal procedure	Dispose in accordance with all applicable government, state, and environmental chemical safety practices.
EPA hazardous waste number	No data available.

14. TRANSPORT INFORMATION

UN number	ADG: Non-Dangerous Goods IMDG: Non-Dangerous Goods IATA: Non-Dangerous Goods
Proper shipping/technical name	Non-Dangerous Goods
Hazard Class	No data available
Packing group	No data available
Environmental hazards	No data available
Special precautions	No data available
Hazchem	Non-Dangerous Goods

15. REGULATORY INFORMATION

Notification Status

Australia (AICS): Listed

New Zealand (NZIoC): Listed

USA (TSCA): Listed

SARA TITLE III:	Section 302 (EHS) Ingredients:	No
	Section 313 Ingredients:	No

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Section 304 (EHS/CERCLA) Ingredients:
Section 311/312 Hazard:

No
Acute health hazard.

16. OTHER INFORMATION

HMIS Rating:	Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
	2		0	0
NFPA Rating:	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
	2	0	0	

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