

MSDS      17721 Calcium chloride anhydrous

User declaration:- I have read and understood this Safety Data Sheet

Name:- \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_



GHS Symbols:      Warning!

Date of Issue/re-issue:- **18.01.2018**

**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Company Name



**ECP LTD** 

Address: 39 Woodside Ave, Northcote, Auckland , New Zealand  
Emergency Tel: NZ: 0800 154 666 (24 h)  
Telephone: 09 480 4386  
Fax 09 480 4385

**Product**      **Calcium Chloride anhydrous 17721**

Synonyms

Tracked Substance?: No

**Regulatory Classification numbers**

CAS Number: 10043-52-4  
UN Number: N/A non hazardous for transport  
HSNO Approval Number: HSR003217  
DG Class : N/A non hazardous for transport  
Secondary DG Class (if any): N/A non hazardous for transport  
Packing group: N/A non hazardous for transport  
Recommended use: Laboratory Investigations

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## 2. Hazards Identification

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### Hazard Classification **GHS Label elements, including precautionary statements**



Pictogram

Signal word **Warning**

New Zealand:

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2007 Transport of Dangerous Goods on Land.

HSNO Classification:

6.1D - Substance that is acutely toxic (Oral)

6.3A - Substance that is irritating to the skin

6.4A - Substance that is irritating to the eyes

9.3C - Substance that is harmful to terrestrial vertebrates

Hazard statement codes:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H433 Harmful to terrestrial vertebrates.

Precautionary statement codes - Prevention:

P102 Keep out of reach of children. -This statement applies only where the substance is available to the general public.

P103 Read label before use. -This statement applies only where the substance is available to the general public.

P104 Read Safety Data Sheet before use.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment. -This statement does not apply where this is the intended use.

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

Precautionary statement codes - Response:

P101 If medical advice is needed, have product container or label at hand. -This statement applies only where the substance is available to the general public.

P330 Rinse mouth.

P331 Do NOT induce vomiting.

INGESTION:

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

EYES:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

SKIN:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P332+P313 If skin irritation occurs: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before re-use.

Precautionary statement codes - Storage:  
No storage statement codes.

Precautionary statement codes - Disposal:  
P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.

**Risk Phrase(s)**  
R22 Harmful if swallowed.  
R36 Irritating to eyes.

**Safety Phrase(s)**  
S20 When using do not eat or drink.  
S22 Do not breathe dust.  
S25 Avoid contact with eyes.  
S39 Wear eye/face protection.  
S46 If swallowed, seek medical advice immediately and show this container or label.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Ingredients	Name	CAS	Proportion
	Calcium Chloride anhydrous	10043-52-4	100 %

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### 4. FIRST AID MEASURES

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<b>Inhalation</b>	If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek immediate medical attention.
<b>Ingestion</b>	Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.
<b>Skin</b>	Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.
<b>Eye</b>	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.
<b>First Aid Facilities</b>	Eye wash and normal washroom facilities.
<b>Advice to Doctor</b>	Treat symptomatically.

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### 5. FIRE FIGHTING MEASURES

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<b>Suitable Extinguishing Media</b>	Use appropriate fire extinguisher for surrounding environment.
<b>Specific Hazards</b>	Non-combustible solid
<b>Precautions in</b>	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive

<b>connection with Fire</b>	pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers.
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## 6. ACCIDENTAL RELEASE MEASURES

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<b>Emergency Procedures</b>	Increase ventilation. Evacuate all unprotected personnel. Do not breathe dust. Wear respiratory protection and full protective clothing to minimise exposure. Sweep up material avoiding dust generation OR where possible use dustless methods such as vacuum to collect the material; then transfer material in to suitable vapour tight labelled containers for subsequent recycling or disposal. Dispose of waste according to applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.
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## 7. HANDLING AND STORAGE

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<b>Precautions for Safe Handling</b>	Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Avoid inhalation of dust, and skin or eye contact. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.
<b>Conditions for Safe Storage</b>	Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in labelled, corrosion-resistant containers. Keep containers tightly closed. Store away from bases, water and other incompatible materials. Have appropriate fire extinguishers available in and near the storage area. Ensure that storage conditions comply with applicable local and national regulations.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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<b>National Exposure Standards</b>	<p>No exposure standards have been established for the mixture by the Australian National Occupational Health &amp; Safety Commission (NOHSC) or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. However, over-exposure to some industrial chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.</p> <p>The exposure limits for dust not otherwise specified are as follows:</p> <p>Australian National Occupational Health And Safety Commission (NOHSC) exposure standards:</p> <p>Dust TWA 10 mg/m<sup>3</sup> (inspirable fraction)</p> <p>New Zealand Workplace Exposure Standards (OSH):</p> <p>Particulates TWA 10 mg/m<sup>3</sup> (inhalable) TWA 3 mg/m<sup>3</sup> (respirable)</p> <p>TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.</p>
<b>Biological Limit Values</b>	No biological limit allocated.
<b>Engineering Controls</b>	Use with good general ventilation. If dusts are produced local exhaust ventilation should be used.
<b>Respiratory Protection</b>	If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.
<b>Eye Protection</b>	Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
<b>Hand Protection</b>	Wear gloves of impervious material. Final choice of appropriate gloves will vary according to

individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

**Body Protection** Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	White fine crystals or granules
<b>Odour</b>	Odourless
<b>Melting Point</b>	260°C
<b>Boiling Point</b>	1600°C
<b>Solubility in Water</b>	Soluble
<b>Solubility in Organic Solvents</b>	Not available
<b>Specific Gravity</b>	0.835
<b>pH Value</b>	5-8 (50 g/l H <sub>2</sub> O, 20°C) approximate
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (Air=1)</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Flammability</b>	Non-combustible
<b>Auto-Ignition Temperature</b>	Not available
<b>Flammable Limits - Lower</b>	Not applicable
<b>Flammable Limits - Upper</b>	Not applicable
<b>Molecular Weight</b>	147.02
<b>Other Information</b>	Bulk Density: 1000 kg/m <sup>3</sup> approximate

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable under ordinary conditions of use and storage. Substance will take the moisture from the air and change into solution if exposed to in open containers.
<b>Conditions to Avoid</b>	This product is strongly hygroscopic, therefore do not leave containers standing open.
<b>Incompatible Materials</b>	Methyl vinyl ether, water, zinc, bromine trifluoride, mixtures of lime boric acid, barium chloride, and 2-furan percarboxylic acid. Metals will slowly corrode in aqueous calcium chloride solutions. Aluminum (and alloys) and yellow brass will be attacked by calcium chloride.
<b>Hazardous Decomposition Products</b>	Thermal decomposition may result in the release of toxic and/or irritating fumes.
<b>Hazardous Polymerization</b>	Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Toxicology Information</b>	LD50 (Oral, Rat): 1,400 mg/kg
<b>Inhalation</b>	Inhalation of airborne dust may cause irritation to the mucous membrane and upper airways. Symptoms of exposure can include coughing, sneezing and breathing difficulties.
<b>Ingestion</b>	Harmful if swallowed. Ingestion of this product will irritate the gastric tract causing nausea and vomiting.
<b>Skin</b>	Skin contact may cause mechanical irritation resulting in redness and itching.
<b>Eye</b>	Irritating to eyes. On eye contact this product will cause tearing, stinging, blurred vision, and redness.
<b>Chronic Effects</b>	Prolonged or repeated skin contact may lead o allergic contact dermatitis in some individuals. The skin may react by producing redness, irritation weals or pustules.

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## 12. ECOLOGICAL INFORMATION

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<b>Ecotoxicity</b>	Not available
<b>Persistence / Degradability</b>	Not available
<b>Mobility</b>	Not available
<b>Environment Protection</b>	Do not discharge this material into waterways, drains and sewers.

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## 13. DISPOSAL CONSIDERATIONS

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<b>Disposal Considerations</b>	<p><b>Product Disposal:</b>  Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service.  Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed.  Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.  In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the ERMA New Zealand website under specific group standards.</p> <p><b>Container Disposal:</b>  The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.  Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.  In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.</p>
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## 14. TRANSPORT INFORMATION

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<b>Transport Information</b>	<p>Australia:  Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)</p>
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New Zealand:  
Not classified as Dangerous Goods for transport according to the NZS 5433:2007 Transport of Dangerous Goods on Land.

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## 15. REGULATORY INFORMATION

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<b>Regulatory Information</b>	Australia: Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia. Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
<b>Poisons Schedule</b>	Not Scheduled
<b>National and or International Regulatory Information</b>	New Zealand: Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. All components of this product are listed on the New Zealand Inventory of Chemicals (NZIoC). HSNO (CCID) Name: Calcium chloride dihydrate
<b>HSNO Approval Number</b>	HSR003217
<b>Hazard Category</b>	Harmful,Irritant

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## 16. Disclaimer

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The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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