

# SAFETY DATA SHEET

## CALCIUM CHLORIDE FLAKES

Infosafe No.: 1HH1J  
ISSUED Date : 19/09/2017  
ISSUED by: CULBEAG HOLDINGS Pty Ltd

### 1. IDENTIFICATION

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**GHS Product Identifier**

CALCIUM CHLORIDE FLAKES

**Company Name**

CULBEAG HOLDINGS Pty Ltd (ABN 95 007 197 079)

**Address**

19 Allied Drive Tullamarine  
VICTORIA 3043 Australia

**Telephone/Fax Number**

Tel: 03 9335 4400  
Fax: 03 9335 1750

**Emergency phone number**

03 9335 4400

**Emergency Contact Name**

Mr Ian Cameron

**E-mail Address**

sales@culbeag.com.au

**Recommended use of the chemical and restrictions on use**

Dustproofing, freeze proofing and thawing coal, coke, stoen, sand, ore, concrete conditioning, paper and pulp industry. De-icing and dust control of roads. Drilling muds. Fungicides. Refrigeration brines. Drying and Dessicating agent. Sequestrant in foods. Firming agent in tomato-canning. Tyre weighting. Pharmaceuticals. Electrolytic cells. Laboratory agent.

### 2. HAZARD IDENTIFICATION

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**GHS classification of the substance/mixture**

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Eye Damage/Irritation: Category 2A

**Signal Word (s)**

WARNING

**Hazard Statement (s)**

H319 Causes serious eye irritation.

**Pictogram (s)**

Exclamation mark

**Precautionary statement – Prevention**

P264 Wash contaminated skin thoroughly after handling.

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

**Precautionary statement – Response**

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.

**Precautionary statement – Storage**

No specific storage statement.

**Precautionary statement – Disposal**

Dispose of contents and container in accordance with State, Territorial or Commonwealth regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Ingredients**

Name	CAS	Proportion
Calcium Chloride	10043-52-4	74-100 %
Water	7732-18-5	0-24 %
Calcium chloride hydrate	10035-04-8	-

### 4. FIRST-AID MEASURES

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**Inhalation**

Remove affected person(s) from exposure into fresh air. If rapid recovery does not occur seek medical attention from a doctor or transport to an emergency hospital.

**Ingestion**

Never give fluids or induce vomiting if the patient is unconscious or having convulsions.

Do NOT induce vomiting.

Rinse mouth with water but do NOT swallow the rinse water. Then give fresh water to drink. If symptoms develop seek medical attention from a doctor or an emergency hospital.

**Skin**

Remove contaminated clothing and footwear. Wash affected skin and hair for 15 minutes with plenty of water and soap, if available. If irritation persists seek medical attention from a doctor or an emergency hospital.

**Eye contact**

If in eye(s), remove contact lens if worn by patient, immediately flush the eyes with plenty of flowing water while holding the eyelid(s) open.

If irritation develops and persists seek medical attention from a doctor or an emergency hospital.

**First Aid Facilities**

Drinking quality water for rinsing mouth, flushing eyes and washing skin and hair. Soap. Eye wash unit.

**Advice to Doctor**

Treat symptomatically based on the patient's reactions.

### 5. FIRE-FIGHTING MEASURES

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**Suitable Extinguishing Media**

Not applicable; calcium chloride does not burn. Extinguishing media most suitable for major source and nearby fire is requirement.

**Hazards from Combustion Products**

None; calcium chloride is a non-combustible solid. Sealed packaging may rupture upon heating. Use water spray to keep intact, exposed packaging cool.

**Special Protective Equipment for fire fighters**

Fire fighters should wear protective clothing and equipment appropriate for the major source of fire.

**Specific Hazards Arising From The Chemical**

None. Product is a non-combustible solid and does not burn. Heat is generated when product mixes with water.

## 6. ACCIDENTAL RELEASE MEASURES

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### Spills & Disposal

If spill of product occurs avoid generation of dust. Do NOT allow product to enter drains, sewers or storm water drains. If product has entered sewers, drains or storm water drains advise relevant authority. Wear appropriate protective clothing and equipment to protect against eye and skin contact. Wear dust removal respirator to prevent inhalation of dust. Sweep up product particles gently, using a dust bonding product, to avoid generation of dust. Use vacuum cleaner to collect dust particles. Place collected material in a marked, sealable container for use (if viable option) or responsible disposal.

### Environmental Precautions

Prevent from entering into soil, drains, sewers, waterways and/or groundwater.

## 7. HANDLING AND STORAGE

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### Precautions for Safe Handling

Handle with care to prevent exposure to or contact with eyes. Wear approved eye protection. Heat developed during diluting or dissolving is very high. Add calcium chloride to cool water in small quantities. Stir continuously while dissolving calcium chloride to avoid hot spots, possible boiling. Avoid contact with eyes, skin, and clothing. Do NOT swallow product. Wash thoroughly after handling. Keep packaging tightly sealed.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry area. Keep containers closed when not in use; Product absorbs water readily i.e. hygroscopic! Protect from moisture.

Product is not classified as a dangerous good for storage purposes. Inspect stored product for damage or leakage. Protect against physical damage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Occupational exposure limit values

A Workplace Exposure Standard (WES)\* has not been established by SWA\* for this product. However the WES for an inspirable dust is 10 mg per cubic metre and 3 mg per cubic metre for respirable dust is suitable guideline.

### Appropriate Engineering Controls

Avoid generation of dust when handling this product. A local and/or general ventilation is recommended to keep the exposure of the employees to dust below the WES for inspirable and respirable dust.

### Respiratory Protection

Personal respiratory protection is recommended as an added control particularly where workplace atmospheric concentrations of inspirable and respirable dust may exceed the Workplace Exposure Standard. Select and fit an approved air-purifying (dust) respirator according to AS/NZS 1716\* and AS/NZS 1715\*.

### Eye Protection

Wear approved chemical goggles. Eye protection complying with AS/NZS 1337\* should be worn to protect against entry of dust into the eyes. Guidance to recommended practices for eye protection in the industrial environment is provided in AS/NZS 1336\*. Ensure that an eye wash facility is readily available in the work area or where the product is being handled and used in the home/work environment.

### Body Protection

Wear long-sleeved overalls. Use gloves, boots and aprons suitable for the proposed operations. PVC, rubber or neoprene are suggested protective materials for this product. Selection of protective clothing can be guided by reference to AS/NZS 4501\*. Remove contaminated clothing promptly. Wash contaminated clothing before re-use.

### Hygiene Measures

It is a good work practice to wash hands, arms and face before eating, drinking or using toilet facilities and at the end of each work period.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

White flakes, granules or powder.

**Odour**

No odour

**Melting Point**

About 772°C

**Boiling Point**

greater than 1600°C

**Solubility in Water**

745 gram per litre. Heat generated when product is dissolved in water.

**Specific Gravity**

About 2.15@25 degrees C. Also refer to Bulk Density information below.

**Vapour Pressure**

Negligible.

**Vapour Density (Air=1)**

Not relevant; product is not volatile.

**Flash Point**

Not applicable

**Flammable Limits - Lower**

Not relevant

**Flammable Limits - Upper**

Not relevant

**Other Information**

Bulk density is 0.75 - 1.0 gm per cubic metre.

## 10. STABILITY AND REACTIVITY

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**Chemical Stability**

Product is stable under normal conditions of handling, storage and temperature. Substance will pick up moisture from the air and go into solution if exposed in open containers.

**Conditions to Avoid**

Avoid generating dust. Avoid product exposure to moisture. Avoid contact with incompatible materials (see below).

**Incompatible materials**

Heat is generated when mixed with water. Spattering and boiling can occur. Reacts with Methyl vinyl ether, water, zinc, bromine trifluoride, mixtures of lime and 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.

**Hazardous Decomposition Products**

Emits toxic chlorine fumes when heated to decomposition. May form hydrogen chloride in presence of sulfuric or phosphoric acids or with water at elevated temperatures

**Possibility of hazardous reactions**

Calcium chloride reacts with zinc producing flammable hydrogen. Product also reacts violently with a mixture of boron oxide (B<sub>2</sub>O<sub>3</sub>) and calcium oxide (CaO). A violent polymerization occurs if calcium chloride is mixed with methyl vinyl ether. Calcium chloride reacts violently with bromine trifluoride (BrF<sub>3</sub>).

## 11. TOXICOLOGICAL INFORMATION

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**Toxicology Information**

For calcium chloride;

Oral toxicity; Rat 900 - 2,100 mg/kg

Dermal toxicity; LD<sub>50</sub>, Rabbit > 5,000 mg/kg

Did not cause birth defects or any other foetal effects in laboratory animals.

In vitro genetic toxicity studies were negative.

**Ingestion**

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause

injury; however, swallowing larger amounts may cause gastrointestinal injury. Swallowing product may result in gastrointestinal irritation or ulceration.

#### **Inhalation**

Dust from flakes and granules may cause irritation to upper respiratory tract (nose and throat). Vapors are unlikely due to physical properties.

#### **Skin**

Brief contact is essentially nonirritating to skin. Prolonged contact may cause skin irritation, even a burn. May cause more severe response if skin is damp, abraded (cut or scratched). May cause more severe response on covered skin (under clothing, gloves). Prolonged skin contact is unlikely to result in absorption of harmful amounts.

#### **Eye**

For dust: May cause severe eye irritation. May cause corneal injury. Effects may be slow to heal.

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## **12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

In Europe, product is not classified as dangerous to aquatic organisms. Low acute toxicity to fish and aquatic organisms.

#### **Environmental Protection**

While calcium chloride is low in acute toxicity to fish and aquatic organisms it is not a good practice to discharge product or its solutions into sewers, watercourses, water storages and drains. Prevent spills from entering sewers, water courses, water storages and drains.

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## **13. DISPOSAL CONSIDERATIONS**

#### **Disposal considerations**

Disposal of waste materials and packaging should be discussed with the State, Territorial or Commonwealth environmental protection regulatory office. If a solution is being made from the product it may be possible to triple rinse the residual calcium chloride from the internal surface of packaging and add rinse water to the solution being prepared. For regular disposal triple rinse empty containers before disposal.

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## **14. TRANSPORT INFORMATION**

#### **Transport Information**

Not classified as a Dangerous Good.\*

#### **U.N. Number**

None Allocated

#### **UN proper shipping name**

None Allocated

#### **Transport hazard class(es)**

None Allocated

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## **15. REGULATORY INFORMATION**

#### **Regulatory information**

Classified\* as a HAZARDOUS CHEMICAL - SEVERE EYE IRRITANT according to GHS criteria for classification and labelling.

Not classified as a Dangerous Good\* for transport or storage.

Not classified as a Scheduled Poison\*.

#### **Poisons Schedule**

Not Scheduled

#### **Packaging & Labelling**

Labelled as a HAZARDOUS CHEMICAL according to SWA Code of Practice\* that requires the following information.

Causes severe eye irritation; and

Prevention Statements, Response Statements and a pictogram to identify the hazard. Section 2 for these statements and type of pictogram.

## Australia (AICS)

Product is listed in the Australian Inventory of Industrial Chemicals (AICS)\*.

## 16. OTHER INFORMATION

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### Date of preparation or last revision of SDS

Review of MSDS of 1 June 2014 and re-issued on 19 SEPTEMBER 2017 as a Safety Data Sheet(SDS) with format in accord with the SWA Code of Practice for Preparation of a Safety Data Sheet\*.

Entered GHS information in Section 2; revised name of expoure standards; revised handling subsection;added in Section 10 statement about reaction with zinc; in section 13 added advice re washing of empty containers before disposal; in Section 15 inserted Hazardous Chemical information - deleted hazardous substance statements; inserted Packaging & Labelling subsection with relevant information; inserted new review/issue date; and reviewed/revise Literature References.

### References

- \* GHS = Globally Harmonised System for the Classification and Labelling Hazardous Chemicals. United Nations publication
- \* Australian Dangerous Goods Code, 7th Edition, 2007 as amended.
- \* WES = Exposure Standards for Atmospheric Contaminants in the Occupational Environment in exposure standards section of HSIS, as amended.
- \* SWA = Safe Work Australia formerly National Occupational Health and Safety Commission.
- ^ 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 the industrial applications.
- \* AS/NZS 1336: Recommended practices for eye protection in the industrial environment.
- \* AS/NZS 4501; - Occupational Protective Clothing.
- \* National Model Code of Practice for Labelling of Workplace Hazardous Chemicals, Safe Work Australia
- \* National Poisons Standard - Commlaw website
- \* SUSMP = Standard for the Uniform Scheduling of Medicines and Poisons, Therapeutics Goods Authority
- \* 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, (03) 9335 4400

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 in the workplace. Each user must review this SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is available on our website at [www.culbeag.com.au](http://www.culbeag.com.au)

## END OF SDS

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