



SAFETY DATA SHEET

Calcium Chloride

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Calcium Chloride
Product code	CG100_5 - CG100_10 - CG100_15 - CG100
Product size	5kg - 10kg - 15kg - 25kg

1.2. Relevant identified uses of the substance or mixture and uses advised against Identified uses

As brine for refrigeration plants; ice and dust control on roads; in cement production; in chemical synthesis; in washing and cleaning products; in fertiliser formulations; in absorbants; in water treatment products; in products such as ph-regulators, flocculants, precipitants, neutralisation agents; as a laboratory reagent; in the manufacture of textiles, leather, fur; in the manufacture of non-metallic mineral products, e.g. plasters, cement; in the manufacture of pulp, paper and paper products; in the manufacture of plastics and rubber product; in the manufacture of computer, electronic and optical products, electrical equipment

1.3. Details of the supplier of the safety data sheet

Supplier	Palatine Paints & Chemicals Limited 55 Smallbrook Lane, Leigh, Lancashire, WN7 5PZ UK +44 (0)1942 884122 (T) sales@palatinepaints.co.uk
Contact person	Sales Department - 08.00 - 17.00 hrs Mon - Fri + 44 (0)1942 884122 (T) - 08.00 - 17.00 hrs Mon - Fri (not 24hr)

1.4. Emergency telephone 0344 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Classification (EC 1272/2008)

Physical hazards	CLP: Eye Irrit. 2
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2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H319 - Causes serious eye irritation.

Precautionary statements P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 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.
 P401 - Store in accordance with local/regional/national/international regulations
 P501 -Dispose of contents/container to local/regional/national/international

Supplemental label information

Contains

Supplementary precautionary statements

2.3. Other hazards

No further relevant information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Calcium Chloride (Anhydrous)		REACH registration number:
CAS number: 10043-52-4	EC number: 233-140-8	01-2119494219-28
Classification H319 - Causes serious eye irritation.		

Calcium Chloride (Dihydrate)		REACH registration number:
CAS number: 10035-04-08	EC number:	01-2119494219-28
Classification		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments

SECTION 4: First aid measures**4.1. Description of first aid measures**

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	DO NOT induce vomiting. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

General information	Get medical attention promptly if symptoms occur after washing.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Toxic gases or vapours. Not combustible Gives off irritating or toxic fumes (or gases) in a fire.
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5.3. Advice for firefighters Protective actions during firefighting	Risk of re-ignition after fire has been extinguished. Cool containers exposed to flames with water until well after the fire is out. Avoid the spillage or runoff entering drains, sewers or watercourses.
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Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Ensure suitable respiratory protection is worn during removal of spillages in confined areas.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Provide adequate ventilation. Avoid the spillage or run off entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Observe any occupational exposure limits for the product or ingredients. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Do not eat, drink or smoke when using the product. The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Prevent any seepage into the ground UNSUITABLE materials: Ferritic steels- danger of pitting corrosion. Store in cool, dry conditions in well sealed receptacles. Protect from humidity and water The identified uses for this product are detailed in Section 1.2. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.
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<u>7.3. Specific end use(s)</u>	The identified uses for this product are detailed in Section 1.2.
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Specific end use(s)

Usage description

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

DNEL (Inhalation) Short term exposure 10 mg/m³

DNEL (Inhalation) Long term exposure 5 mg/m³

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Wear chemical splash goggles.

Hand protection

To protect hands from chemicals, gloves should comply with European Standards EN388 and 374. As a general principle, exposure should be managed by means other than the provision of protective gloves. Manufacturers' performance data suggest that the optimum glove for use should be: Wear protective gloves made of the following material: Nitrile rubber. Thickness: ≥ 0.31 mm Permeation breakthrough time according to EN374 - class: (1-6) e.g. minimum 480 mins. Caution: The performance of gloves under actual working conditions can be significantly affected by many factors and the information provided according to EN374 may not accord with what is achieved in practice. We recommend that expert professional advice is sought that takes into account of the work processes and working environment applicable for each task where gloves are to be worn.

Other skin and body protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. In case of inadequate ventilation use suitable respirator. It is recommended to use respiratory equipment with combination filter, type A2/P2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Solid
Colour	White
Odour	Odourless.
Odour threshold	Not determined.
pH	100 g/l) at 20 deg C 8-10.
Melting point	782 °C
Initial boiling point and range	1601 °C
Relative density	2.15 g/cm ³ at 20 deg C
Solubility(ies)	Water solubility 20 °C 740 g/l
Viscosity	Not determined
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.

9.2. Other information

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity Stable under normal conditions

10.2. Chemical stability

Stability The substance decomposes on heating at high temperature and on burning producing toxic and corrosive fumes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The solution in water is a weak base. Attacks zinc in presence of water forming highly flammable hydrogen gas. Dissolves violently in water with liberation of much heat. Calcium chloride liquors can cause pitting of and corrosion of some grades of stainless steel and under high temperature and stress conditions can promote stress corrosion cracking. The substance can react dangerously with: bromine trifluoride; boron trioxide and calcium oxide; zinc- hydrogen.

10.4. Conditions to avoid

Conditions to avoid No further relevant information available.

10.5. Incompatible materials

Materials to avoid No further relevant information available.

10.6. Hazardous decomposition products

Hazardous decomposition products Hydrogen chloride (HCl)

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

- LD50 (oral, rat) > 2000 mg/kg
- LD50 (dermal, rabbit) > 5000 mg/kg
- LC50/4 h (Inhalation, rat) > 160mg/l
- Eye contact: Irritating effects
- Skin contact No irritant effects
- Sensitization: Not sensitising
- Chronic toxicity Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the nasal mucous membrane, resulting in ulcerations.
- Mutagenicity Not Classified
- Carcinogenicity Not Classified
- Reproductive toxicity Not Classified
- STOT-single exposure Not Classified
- STOT-repeated exposure Not Classified
- Aspiration hazard Not Classified

SECTION 12: Ecological information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity**Ecological information on ingredients.**

No further relevant information available.

12.2. Persistence and degradability**12.3. Bioaccumulative potential**

No further relevant information available.

12.4 Mobility in Soil

No further relevant information available

12.5. Results of PBT and vPvB assessment

No further relevant information available

12.6. Other adverse effects

No further relevant information available

Other adverse effects**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

General information Avoid the spillage or runoff entering drains, sewers or watercourses.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class**SECTION 14: Transport information**

14.1 UN Number - UN No.: None

14.2 UN Proper Shipping Name - Proper Shipping Name: None

14.3 Transport hazard class(es) - Hazard Class: None

14.4 Packing group - Packing Group: None

14.5 Environmental hazards - None

14.6 Special precautions for user - Not applicable

14.7 Transport in bulk according to Annex II of MARPOL and the IBC code**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories**EU - EINECS/ELINCS**

None of the ingredients are listed or exempt.

SECTION 16: Other information**Abbreviations and acronyms
used in the safety data sheet**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

**Classification abbreviations
and acronyms**

Acute Tox. = Acute toxicity
Aquatic Acute = Hazardous to the aquatic environment (acute)
Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Asp. Tox. = Aspiration hazard
Flam. Liq. = Flammable liquid
STOT RE = Specific target organ toxicity-repeated exposure
STOT SE = Specific target organ toxicity-single exposure

Training advice

Read and follow manufacturer's recommendations.

Revision comments

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