

TECHNICAL DATA SHEET

Calcium Chloride, anhydrous

1. SUPPLIER INFORMATION

JAK Water Systems Ltd, Unit 1 Scopwick Lodge, Scopwick Heath, Metheringham, Lincoln, LN4 3DL
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2. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

2.1 Identification of the substance

Calcium chloride, anhydrous.

2.2 Use of the substance:

General uses include the following applications:

Chemical: As a source of Calcium for the manufacture of other Calcium chemicals.

3 HAZARDS IDENTIFICATION:

3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Eye irritation (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Irritant

R-phrases: R36 Irritating to eyes.

S-phrases: S22 Do not breathe dust.

S24 Avoid contact with skin.

3.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word

Warning

Hazard statement(s)

H319

Causes serious eye irritation.

Precautionary statement(s)

P305 + P351 + P338

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

3.3 Other hazards - none

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4 COMPOSITION/INFORMATION ON INGREDIENTS

4.1 Substances

Formula : CaCl₂

Molecular Weight : 110.98 g/mol

EC No. 233-140-8

CAS-No. 10043-52-4

5 FIRST AID MEASURES

EYES: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

SKIN: Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

INHALATION: Move into fresh air and keep at rest. If not breathing, give artificial respiration. Get medical attention if any discomfort continues.

INGESTION: Never give anything by mouth to an unconscious person.. Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions. DO NOT induce vomiting. Get medical attention immediately.

GENERAL INFORMATION

Keep the affected person warm and at rest. Get prompt medical attention.

NOTES TO THE PHYSICIAN

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, seek MEDICAL ATTENTION PROMPTLY.

5.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

5.3 Indication of any immediate medical attention and special treatment needed

no data available

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6 FIRE-FIGHTING MEASURES

6.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas, Calcium oxide

6.3 Advice for firefighters

Wear self-contained breathing apparatus for fire fighting if necessary.

7 ACCIDENTAL RELEASE MEASURES

7.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

7.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

7.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

8 HANDLING AND STORAGE

8.1 Usage precautions:

Avoid breathing dust and contact with skin and eyes. Eye wash facilities and emergency shower must be available when handling this product. Avoid handling which leads to dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist.

8.2 Storage:

Store in tightly closed original container in a dry, cool and well ventilated place. Keep in original container. Moisture sensitive.

8.3 Specific end uses

no data available

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9 EXPOSURE CONTROLS/PERSONAL PROTECTION

9.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

9.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat drink or smoke.

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10 PHYSICAL AND CHEMICAL PROPERTIES

10.1 General information:

a) Appearance Form:	crystalline
b) Odour	Colour: white
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	772 °C
f) Initial boiling point and boiling range	1,670 °C
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	0.01 hPa at 20 °C
l) Vapour density	no data available
m) Relative density	2.150 g/cm ³
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Autoignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

10.2 Other safety information

no data available

10.3 Important properties:

Chemical Name: Calcium Chloride
Molecular Formulae: CaCl₂

11 STABILITY AND REACTIVITY

11.1 Reactivity

no data available

11.2 Chemical stability

no data available

11.3 Possibility of hazardous reactions

no data available

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12 TOXICOLOGICAL INFORMATION

12.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 1,000 mg/kg

Skin corrosion/irritation

Skin - rabbit - No skin irritation

Serious eye damage/eye irritation

Eyes - rat - Severe eye irritation

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

Genotoxicity in vivo - rat - Intraperitoneal

Unscheduled DNA synthesis

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes Causes eye burns.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: EV9800000

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13 ECOLOGICAL INFORMATION

13.1 Toxicity

Toxicity to fish LC50 - Lepomis macrochirus - 10,650 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 52 mg/l - 48 h

13.2 Persistence and degradability

no data available

13.3 Bioaccumulative potential

no data available

13.4 Mobility in soil

no data available

13.5 Results of PBT and vPvB assessment

no data available

13.6 Other adverse effects

Harmful to aquatic life.

14 DISPOSAL CONSIDERATIONS

14.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product. Waste is classified, as hazardous Disposal should be in accordance with local or state or national legislation. Landfill should be appropriate.

15 TRANSPORT INFORMATION

Not classified as hazardous for transport.

16 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

16.2 Chemical Safety Assessment

no data available

17 Other Information:

This data sheet was prepared in accordance with EC Regulation No. 1907/2006 concerning REACH.

The information given in this data sheet is for guidance only and does not constitute a risk assessment under the COSHH Regulations. It is provided in good faith and to the best of our knowledge, but no warranty, express or implied, is made.