



SAFETY DATA SHEET

calcium chloride

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

1.1. Product identifier

| | |
|---------------------------|---|
| Product name | calcium chloride |
| Synonyms; trade names | Kontrol Krystals 500g, Kontrol Krystals 2.5kg, Kontrol Mini Moisture Trap, Kontrol Streamline Moisture Trap, Kontrol Universal Refill Tabz, Kontrol Super Streamline Mega Moisture Trap |
| REACH registration number | 01-2119494219-28-XXXX |
| CAS number | 10043-52-4 |
| EU index number | 017-013-00-2 |
| EC number | 233-140-8 |

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

| | |
|----------------------|--|
| Identified uses | Moisture absorber. |
| Uses advised against | No specific uses advised against are identified. |

1.3. Details of the supplier of the safety data sheet

| | |
|----------|---|
| Supplier | Kontrol UK Ltd Unit 1 Woodside Farm Lizard Lane Shifnal Shropshire TF11 8QE www.kontrolukltd.com Tel: 01952 850 596 Fax: 01952 850 748 sales@kontrolukltd.com |
|----------|---|

1.4. Emergency telephone number

| | |
|---------------------|---|
| Emergency telephone | 01952 850 596 Monday - Friday 9.00 am - 5.00 pm |
|---------------------|---|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Not Classified

Health hazards

Eye Irrit. 2 - H319

Environmental hazards

Not Classified

Classification (67/548/EEC or 1999/45/EC)

Xi; R36

2.2. Label elements

calcium chloride

EC number 233-140-8

Pictogram

Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P102 Keep out of reach of children.

P280 Wear eye 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.

Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients**3.1. Substances**

| | |
|---------------------------|-----------------------|
| Product name | calcium chloride |
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SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation**

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if symptoms are severe or persist.

Ingestion

Do not induce vomiting unless under the direction of medical personnel. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if symptoms are severe or persist.

Skin contact

Take off contaminated clothing. Wash skin thoroughly with soap and water or use an approved skin cleanser. Wash contaminated clothing before reuse.

Eye contact

Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Get medical attention if symptoms are severe or persist after washing.

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

Granules may form dusts during use, which may cause irritation to the respiratory system if inhaled.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation.

calcium chloride

Eye contact

Irritating. A single exposure may cause the following adverse effects: Redness. Pain. Profuse watering of the eyes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards

The product is non-combustible.

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters

Use protective equipment appropriate for surrounding materials. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet.

6.2. Environmental precautions

Environmental precautions

Do not discharge into drains or watercourses or onto the ground. Avoid spreading dust or contaminated materials.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Absorb spillage with non-combustible, absorbent material. Flush contaminated area with plenty of water. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Avoid contact with skin and eyes. Read and follow manufacturer's recommendations.

Advice on general occupational hygiene

Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

calcium chloride

Store in tightly-closed, original container in a dry and cool place. Store away from the following materials: Stainless steel.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ingredient comments

No exposure limits known for ingredient(s).

8.2. Exposure controls

Eye/face protection

Wear tight-fitting, dust-resistant, chemical splash goggles if airborne dust is generated.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The breakthrough time for any glove material may be different for different glove manufacturers. It is recommended that gloves are made of the following material: Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC).

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Particulate filter, type P2.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Flakes. Solid, high dustiness.

Colour

White.

Odour

Odourless.

Odour threshold

Not relevant.

pH

pH (diluted solution): ~ 7 @ 1590 g/l

Melting point

782°C

Initial boiling point and range

> 1600°C @ 1013 hPa

Flash point

Not relevant.

Evaporation rate

Scientifically unjustified.

Flammability (solid, gas)

Not relevant.

Upper/lower flammability or explosive limits

Not relevant.

Vapour pressure

calcium chloride

Scientifically unjustified.

Vapour density

Scientifically unjustified.

Relative density

2.15 @ 15°C

Solubility(ies)

Soluble in water. Hygroscopic.

Partition coefficient

Not determined.

Auto-ignition temperature

Scientifically unjustified.

Decomposition Temperature

Not determined.

Viscosity

Scientifically unjustified.

Explosive properties

Technically not feasible.

Oxidising properties

Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Will not polymerise.

10.4. Conditions to avoid

Avoid heat.

10.5. Incompatible materials

Materials to avoid

Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

None at ambient temperatures.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)

2,120.0

Species

Rat

Notes (oral LD50)

calcium chloride

REACH dossier information.

ATE oral (mg/kg)

2,120.0

Acute toxicity - dermal

Notes (dermal LD50)

> 5000 mg/kg, Rabbit REACH dossier information.

Skin corrosion/irritation

Animal data

Dose: CaCl₂, 4 hours, Rabbit Primary dermal irritation index: 0 REACH dossier information. Not irritating.

Serious eye damage/irritation

Dose: 0.1 ml (33%), 24, 48, 72 hours, Rabbit REACH dossier information. Moderately irritating. Eye Irrit. 2 - H319 Causes serious eye irritation.

Skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro

Chromosome aberration: Negative. REACH dossier information.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - development

Maternal toxicity: - NOAEL: > 189 mg/kg/day, Oral, Mouse REACH dossier information.

Specific target organ toxicity - single exposure

STOT - single exposure

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 4630 mg/l, Pimephales promelas (Fat-head Minnow) LC₅₀, 48 hours: > 6560 mg/l, Pimephales promelas (Fat-head Minnow) LC₅₀, 24 hours: > 6660 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.

Acute toxicity - aquatic invertebrates

NOEC, 48 hours: 2000 mg/l, Daphnia magna LC₅₀, 48 hours: 2400 mg/l, Daphnia magna REACH dossier information.

Acute toxicity - aquatic plants

EC₅₀, 72 hours: 2900 mg/l, Selenastrum capricornutum REACH dossier information.

Chronic toxicity - aquatic invertebrates

EC₅₀, 21 days: 610 mg/l, Daphnia magna LC₅₀, 21 days: 920 mg/l, Daphnia magna REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability

Substance is inorganic. Not applicable.

12.3. Bioaccumulative potential

Substance is inorganic. Not applicable.

calcium chloride

Partition coefficient

Not determined.

12.4. Mobility in soil

Mobility

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

National regulations

EH40/2005 Workplace exposure limits. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation

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). 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). Dangerous Preparations Directive 1999/45/EC.

15.2. Chemical safety assessment

calcium chloride

No chemical safety assessment has been carried out.

SECTION 16: Other information**Classification procedures according to Regulation (EC) 1272/2008**

Eye Irrit. 2 - H319: On basis of test data., Expert judgement.

Revision comments

Data sheet reviewed.

Revision date 08/08/2014

Revision 2

Supersedes date 01/03/2013

SDS number 1936

Risk phrases in full

R36 Irritating to eyes.

Hazard statements in full

H319 Causes serious eye irritation.