SAFETY DATA SHEET
Calcium Chloride Anhydrous (94 - 98%)

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

1.1. Product identifier

Product name
Calcium Chloride Anhydrous (94 - 98%)

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
Chemicals for synthesis

Uses advised against
No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer
Jubail Chemical Industries Company (JANA)
P.O. BOX - 11919
Jubail Industrial City - 31961
Saudi Arabia
Tel. +966 13 3478888 ext 351
Fax. +966 13 3476705
safety@nama.com.sa

Only Representative REACH
1907/2006/EC Article 8
NAMA Germany
Teichstrasse 38
D-79539 Lörrach
Tel. + 49 762 1940 5410
Fax. + 49 762 1940 5420

1.4. Emergency telephone number

Emergency telephone
Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards
Not Classified

Health hazards
Acute Tox. 4 - H302 Eye Irrit. 2 - H319

Environmental hazards
Not Classified

2.2. Label elements

EC number
233-140-8

Hazard pictograms

[Warning symbol]
Calcium Chloride Anhydrous (94 - 98%)

Signal word
Warning

Hazard statements
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary statements
P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
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.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards
Results of PBT and vPvB assessment: Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances
Product name Calcium Chloride Anhydrous (94 - 98%)
EU index number 017-013-00-2
CAS number 10043-52-4
EC number 233-140-8

SECTION 4: First aid measures

4.1. Description of first aid measures
General information Promptly remove any clothing that becomes contaminated.
Inhalation IF INHALED: Get medical attention if any discomfort continues. Remove person to fresh air and keep comfortable for breathing.
Ingestion IF SWALLOWED: Get medical attention immediately. Rinse mouth thoroughly with water. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical.
Skin contact IF ON SKIN: Not irritating. Rinse immediately with plenty of water.
Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention if symptoms are severe or persist after washing.

4.2. Most important symptoms and effects, both acute and delayed
General information No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Notes for the doctor No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture
Specific hazards No information available.

5.3. Advice for firefighters
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Special protective equipment for firefighters
Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions
No information required.

6.2. Environmental precautions
Environmental precautions
Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up
Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Clean contaminated objects and areas thoroughly, observing environmental regulations.

6.4. Reference to other sections
Reference to other sections
Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Usage precautions
Avoid handling which leads to dust formation.

7.2. Conditions for safe storage, including any incompatibilities
Storage precautions
Store in tightly-closed, original container in a dry and cool place. The substance is hygroscopic and will absorb water by contact with the moisture in the air.

7.3. Specific end use(s)
Specific end use(s)
No information available.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

8.2. Exposure controls
Protective equipment

Personal protection
Keep away from food, drink and animal feeding stuffs. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Avoid contact with skin and eyes.

Eye/face protection
Wear tight-fitting, chemical splash goggles or face shield.

Hand protection
Wear protective gloves. For users with sensitive skin, it is recommended that suitable protective gloves are worn. It is recommended that gloves are made of the following material: Nitrile rubber. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Other skin and body protection
Wear protective clothing.
Calcium Chloride Anhydrous (94 - 98%)

Hygiene measures
Keep away from food, drink and animal feeding stuffs. Wash hands thoroughly after handling. Avoid contact with skin, eyes and clothing. Use appropriate skin cream to prevent drying of skin.

Respiratory protection
Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>782°C</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>&gt;1,600 °C (DIN 51751)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>The product is not flammable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>2.15 g/cm³ @20°C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>740 g/l @20</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Organic solvents</td>
<td>0.0%</td>
</tr>
<tr>
<td>VOC (EC)</td>
<td>0.00%</td>
</tr>
<tr>
<td>VOC (CH)</td>
<td>0.00%</td>
</tr>
<tr>
<td>Solid content</td>
<td>100%</td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity
No information available.

10.2. Chemical stability
Thermal decomposition / conditions to be avoided
Does not decompose when used and stored as recommended.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
No potentially hazardous reactions known.

10.4. Conditions to avoid
Conditions to avoid
No information available.

10.5. Incompatible materials
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Materials to avoid: Zinc. Water. Vinylmethylether, Bortrifluoride

### 10.6. Hazardous decomposition products

Hazardous decomposition products: No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicological effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicological effects</strong></td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td><strong>Acute toxicity - oral</strong></td>
<td></td>
</tr>
<tr>
<td>Notes (oral LD₅₀)</td>
<td>LD₅₀ 1000 mg/kg, Oral, Rat</td>
</tr>
<tr>
<td><strong>ATE oral (mg/kg)</strong></td>
<td>500.0</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td><strong>Respiratory sensitisation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Genotoxicity - in vitro</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>STOT - single exposure</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>STOT - repeated exposure</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>

- **Ingestion**: Gastrointestinal symptoms, including upset stomach.
- **Skin contact**: Causes skin irritation.
- **Eye contact**: May cause eye irritation.

### SECTION 12: Ecological information

#### General Notes

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Avoid the spillage or runoff entering drains, sewers or watercourses.

- **Toxicity**: No information available.

- **Persistence and degradability**: No information available.

- **Bioaccumulative potential**: No information available.
Calcium Chloride Anhydrous (94 - 98%)  

Bioaccumulative potential  
No information available.

Partition coefficient  
Not determined.

12.4. Mobility in soil  
Mobility  
No information available.

12.5. Results of PBT and vPvB assessment  
12.6. Other adverse effects  
Other adverse effects  
No information available.

SECTION 13: Disposal considerations  

13.1. Waste treatment methods  

Disposal methods  
Dispose of waste product or used containers in accordance with local regulations Dispose of waste via a licensed waste disposal contractor. Control run-off water by containing and keeping it out of sewers and watercourses.

European waste catalogue:  
06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

SECTION 14: Transport information  

14.1. UN number  
UN No. (ADR/RID)  
Void

UN No. (IMDG)  
Void

UN No. (ICAO)  
Void

14.2. UN proper shipping name  

Proper shipping name (ADR/RID)  
Void

Proper shipping name (IMDG)  
Void

Proper shipping name (ICAO)  
Void

14.3. Transport hazard class(es)  

ADR/RID class  
Void

IMDG class  
Void

ICAO class/division  
Void

ADN class  
Void

14.4. Packing group  

ADR/RID packing group  
Void

IMDG packing group  
Void

ICAO packing group  
Void

14.5. Environmental hazards  

Environmentally hazardous substance/marine pollutant  
No.

14.6. Special precautions for user
Calcium Chloride Anhydrous (94 - 98%)

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

ADR and IMDG:

SECTION 15: Regulatory information

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

National regulations


15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA-DGR: Dangerous Goods Regulation by the "International Air Trasport Association"(IATA).
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
IMDG: International Maritime Dangerous Goods.
IATA: International Air Transport Association.
GHS: Globally Harmonized System.
EINECS: European Inventory of Existing Commercial and Chemical Substances.
CAS: Chemical Abstracts Service.
VOCV: Lengkungsabgabe auf fluchtingen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds).
VOC: Volatile Organic Compounds (USA,EU).
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.
Acute Tox. 4 - H302
Eye Irrit. 2A - H319
WGK: German Water Hazard Class.

Revision date 01/11/2018
Revision 01
Supersedes date 05/07/2018
SDS number 4646
Hazard statements in full

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
Calcium Chloride Anhydrous (94 - 98%)

**Disclaimer**

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