



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

- **1.1 Product identifier**
- **Trade name:** **Calcium chloride anhydrous**
- **CAS Number:**
10043-52-4
- **EC number:**
233-140-8
- **Index number:**
017-013-00-2
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Chemicals for synthesis
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Jubail Chemical Industries Company (JANA)
P.O.Box - 11919
Jubail Industrial City - 31961
Saudi Arabia
Phone + 966 13 347 8888 ext. 351 fax + 966 13 347 6705
- **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
- **Further information obtainable from:** safety: e-mail: safety@nama.com.sa
- **1.4 Emergency telephone number:**
Tox Info Suisse
Freiestrasse 16 CH-8032 Zurich
Emergency phone number (from outside Switzerland): 0041 44 251 51 51 (24h)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
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Acute Tox. 4 H302 Harmful if swallowed.
Eye Irrit. 2 H319 Causes serious eye irritation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**
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GHS07
- **Signal word** Warning
- **Hazard-determining components of labelling:**
calcium chloride
- **Hazard statements**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Trade name: Calcium chloride anhydrous

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· **Precautionary statements**

- P264 Wash thoroughly after handling.
 P280 Wear eye protection / face protection.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/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 local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
 · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.1 Chemical characterisation: Substances**

- **CAS No. Description**
 10043-52-4 calcium chloride
 · **Identification number(s)**
 · **EC number:** 233-140-8
 · **Index number:** 017-013-00-2

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.
 · **After inhalation:** Supply fresh air; consult doctor in case of complaints.
 · **After skin contact:**
 Generally the product does not irritate the skin.
 Immediately rinse with water.
 · **After eye contact:**
 Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
 · **After swallowing:**
 Call for a doctor immediately.
 Rinse out mouth and then drink plenty of water.
 · **Information for doctor:**
 · **Most important symptoms and effects, both acute and delayed** No further relevant information available.
 · **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
 · **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
 · **5.3 Advice for firefighters**
 · **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
 · **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
 · **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.

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Trade name: Calcium chloride anhydrous

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- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Prevent formation of dust.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
This product is hygroscopic.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Trade name: Calcium chloride anhydrous

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· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Solid
· Colour:	White
· Odour:	Odourless

· **pH-value:** Not applicable.

· **Change in condition**

· Melting point/freezing point:	782 °C
· Initial boiling point and boiling range:	>1,600 °C (DIN 51751)

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Product is not flammable.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure:** Not applicable.

· **Density at 20 °C:** 2.15 g/cm³

· **Solubility in / Miscibility with water at 20 °C:** 740 g/l

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

· Dynamic:	Not applicable.
· Kinematic:	Not applicable.

· **Solvent content:**

· Organic solvents:	0.0 %
· VOC (EC)	0.00 %
· VOC (CH)	0,00 %

· **Solids content:** 100.0 %

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** Vinylmethylether, Bortrifluoride, Zinc, water.

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Trade name: Calcium chloride anhydrous

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· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity**

Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

10043-52-4 calcium chloride

Oral	LD50	1000 mg/kg (rat)
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· **Primary irritant effect:**

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation**

Causes serious eye irritation.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· **Additional toxicological information:**

After inhalation of dust: Irritation in the respiratory system.

After skin contact: local irritation symptoms

After eye contact: Irritations

After swallowing of large amounts: gastrointestinal complaints.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

· **European waste catalogue**

06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN-Number
· ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
calcium chloride
- **Hazard statements**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
- **Precautionary statements**
P264 Wash thoroughly after handling.
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P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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Trade name: Calcium chloride anhydrous

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· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** product safety department

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances CAS:

Chemical Abstracts Service (division of the American Chemical Society)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· *** Data compared to the previous version altered.**