SAFETY DATA SHEET
Calcium Chloride Solution 35%

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

1.1. Product identifier

Product name: Calcium Chloride Solution 35%
ECHA Reference: CAS 10043-52-4 (Aqueous Solution)
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: Construction, drilling muds, deicing
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 Löffach
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
Calcium Chloride Solution 35%

Pictogram

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 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 national regulations.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>calcium chloride</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 10043-52-4</td>
<td>EC number: 233-140-8</td>
</tr>
</tbody>
</table>

Classification
Eye Irrit. 2 - H319

The full text for all hazard statements is displayed in Section 16.

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
The product is not flammable.
Calcium Chloride Solution 35%

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

5.3. Advice for firefighters
Special protective equipment for firefighters
No information available.

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
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 contact with skin, eyes and clothing. Wash at the end of each work shift and before eating, smoking and using the toilet. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not allow contact with Methyl vinyl products (possibly causing runaway polymerization)

7.2. Conditions for safe storage, including any incompatibilities
Storage precautions
Store in tightly-closed, original container.

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

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters
Occupational exposure limits
No exposure limits known for ingredient(s).

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.
Calcium Chloride Solution 35%

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.

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>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Clear</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>15°C</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>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>35%</td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity
No information available.

10.2. Chemical stability
Stability
Stable at normal ambient temperatures and when used 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
Calculus Chloride Solution 35%

10.6. Hazardous decomposition products
Hazardous decomposition products
No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological effects
Harmful if swallowed.

Acute toxicity - oral
Notes (oral LD₅₀)
LD₅₀ 1000 mg/kg, Oral, Rat
ATE oral (mg/kg)
500.0

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

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory sensitisation
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Genotoxicity - in vitro
Based on available data the classification criteria are not met.

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

Reproductive toxicity
Reproductive toxicity - fertility
Based on available data the classification criteria are not met.

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.

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.

12.1. Toxicity
Toxicity
No information available.

12.2. Persistence and degradability
Persistence and degradability
No information available.

12.3. Bioaccumulative potential
Bioaccumulative potential
No information available.
Calcium Chloride Solution 35%

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

General
Void

14.1. UN number

UN No. (ADR/RID) Void
UN No. (IMDG) Void
UN No. (ICAO) Void
UN No. (ADN) Void

14.2. UN proper shipping name

Proper shipping name
(ADR/RID) Void
Proper shipping name (IMDG) Void
Proper shipping name (ICAO) Void
Proper shipping name (ADN) 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 Solution 35%

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

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 Transport 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).
LCl₅₀: 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

Revision date 01/11/2018
Revision 01
Supersedes date 01/07/2018
SDS number 4594
Hazard statements in full
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
Calcium Chloride Solution 35%

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.