SAFETY DATA SHEET
Calcium chloride LIQUID technical grade
25–30-33% (depends on requirement)

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

PRODUCT NAME: Calcium chloride LIQUID technical grade
GENERAL USE: Anti-icing material, road stabilization, dust prevention
PRODUCT FORMULATION NAME: Calcium chloride technical liquid
CHEMICAL FAMILY: Inorganic salt
MOLECULAR FORMULA: CaCl₂
MANUFACTURER: KISCHEMICALS Kft.; H-3792 Sajóbáfony, Gyártelep HUNGARY
Phone: +36 46 549-610
Distributor: SIRIUS PRODUKT Kft. 1044 Budapest, Szilaspatak sor 42/b; Phone: +3670 333-3979; e-mail: info@siriusprodukt.com

2. HAZARDS IDENTIFICATION

HAZARD DESIGNATION
H319: Causes serious eye irritation.
Hazard Class: Eye Irritation 2

EMERGENCY OVERVIEW
PHYSICAL APPEARANCE: Solution from yellowish -grey to greenish color, transparent or with light turbidity
IMMEDIATE CONCERNS: Causes eye irritation. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Wash thoroughly after handling.

POTENTIAL HEALTH EFFECTS
EYES: May cause irritant or burn effects to the eyes.
SKIN: May cause irritant effects to the skin.
INGESTION: May cause nausea. May cause GI tract irritation.
INHALATION: May cause irritation to mucous membranes and respiratory system.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
EYES: Burning of the eyes.
SKIN: Burning of the skin.
INGESTION: Possible nausea and/or vomiting.
INHALATION: Coughing, burning, tightness of chest and/or shortness of breath.
ACUTE TOXICITY: No test data is available for acute dermal toxicity.
Not expected to cause significant adverse effects if ingested.
No test data is available for acute inhalation toxicity.
CARCINOGENICITY: Not Listed by NTP
Not listed by IARC
Not listed by OSHA
MUTAGENICITY: Not Available

REPRODUCTIVE TOXICITY
REPRODUCTIVE
EFFECTS: Not Available
TERATOGENIC EFFECTS: Not Available
MEDICAL CONDITIONS AGGRAVATED: None known
SENSITIZATION: Not Available

COMMENTS: For detailed toxicological information see Section 11.
SAFETY DATA SHEET
Calcium chloride LIQUID technical grade
25–30-33% (depends on requirement)

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Wt%o</th>
<th>Component Name</th>
<th>RTECS Number</th>
<th>Probable Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>10043-52-4</td>
<td>25, min</td>
<td>Calcium Chloride</td>
<td>EV98000000</td>
<td>Calcium Carbonate, Calcium Hydroxide, Calcium Oxide, Alkali Metal Chlorides, Alkaline Earth Metal Chlorides</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
SKIN: Remove contaminated clothing; wash with soap and water.
INGESTION: Get prompt qualified medical attention. If conscious, give 1-2 glasses of water and induce vomiting. Give activated carbon, salt depletive.
INHALATION: Remove to fresh air. Give oxygen or artificial aspiration if needed.
Notes to Physicians: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Nonflammable
FLAME PROPAGATION OR BURNING RATE OF SOLIDS: Not Applicable
GENERAL HAZARD: Negligible fire hazard when exposed to heat or flame
EXTINGUISHING MEDIA: Water Fog
FIRE FIGHTING PROCEDURES: This product is a nonflammable substance. However, hazardous decomposition and combustion products may be formed in a fire situation. Cool exposed containers with water spray to prevent overheating. Extinguish fire using agent suitable for type of surrounding fire and/or chemicals. Do not use water directly on material. Avoid breathing corrosive vapors.
FIRE FIGHTING EQUIPMENT: Respiratory and eye protection are required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Wearing the appropriate personal protective equipment designated in Section 8, move the container to a containment area or rotate the container so that the opening is above the liquid level.
LARGE SPILL: Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Wearing the appropriate personal protective equipment designated in Section 8, close or cap valves and/or block or plug hole in leaking container and transfer to another container.

ENVIRONMENTAL PRECAUTIONS
WATER SPILL: Use appropriate containment to avoid runoff or release to sewer or waterways.
LAND SPILL: Use appropriate containment to avoid runoff or release to ground.
GENERAL PROCEDURES: Remove containers with disposal from release area.

7. HANDLING AND STORAGE

HANDLING: Avoid skin and eye contact. Wash hands thoroughly after handling. Launder contaminated clothing before re-use. Ventilate area. Use proper protective and respiratory equipment. Sweep or vacuum; place in a dry container for disposal. Clean spill area with water. Store in a cool, dry, well-ventilated place. Keep container closed when not in use. Keep away from incompatible materials.

NEUTRALIZING AGENT: Not applicable.
PRECAUTIONS: Store in a cool, dry, well-ventilated place. Keep container closed when not in use. Keep away from incompatible materials. Protect from atmospheric moisture.

Observe all federal, state, and local regulations when storing this product.
SAFETY DATA SHEET
Calcium chloride LIQUID technical grade
25–30-33% (depends on requirement)

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING CONTROLS: Where environmental controls are lacking or in enclosed spaces use a NIOSH/MSHA approved respirator for dust/fumes. Provide local exhaust ventilation system. Eye wash station and safety shower should be provided within the immediate work area for emergency use.
EXPOSURE LIMITS: No occupational exposure limits established by OSHA/ACGIH/NIOSH.

PERSONAL PROTECTIVE EQUIPMENT:
EYES: Wear safety glasses with splash shields or safety goggles/shield.
BODY: Wear appropriate protective (impervious) clothing. Leather work boots and/or leather products will dehydrate with resultant shrinkage and possible destruction.
RESPIRATORY: A respirator is not indicated under normal operating conditions. Use of a NIOSH approved respirator should be based upon the presence of nuisance dust. When warranted, use a face mask particulate respirator with particulate respirator with a NIOSH N95 rating.
HANDS AND FEET: Wear appropriate rubber gloves and non-leather protective boots.
WORK HYGIENIC PRACTICES: Use reasonable care in handling this product. Wash hands after use and before eating.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solution from yellowish -grey to greenish color, transparent or with light turbidity
SPECIFIC GRAVITY: 1,3338 g/sm 3
BOILING POINT: 108 °C
FREEZING TEMPERATURE: -15,6 °C

10. STABILITY AND REACTIVITY

STABILITY AND REACTIVITY React with acids and alkali
HAZARDOUS DECOMPOSITION None under normal conditions
CONDITIONS TO AVOID None specified by Manufacturer
POLYMERIZATION Does not occur under normal temperatures and pressures

11. TOXICOLOGICAL INFORMATION

DL50: 1000-4000 mg/kg, oral, rat
DL50: 1940 mg/kg, oral, mouse
DL50: 1384 mg/kg, oral, rabbit
LOCAL EFFECTS: Eye, mucous membrane and skin irritant.
HEALTH EFFECTS: Moderately toxic by ingestion, slightly toxic by dermal absorption.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Not Available
DISTRIBUTION: Not Available
CHEMICAL FATE INFORMATION: Not Available
DEGRADABILITY: Product will not biodegrade or accumulate

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations.
FOR LARGE SPILLS: Contain material according to section 6.
SAFETY DATA SHEET
Calcium chloride LIQUID technical grade
25–30-33% (depends on requirement)

PRODUCT DISPOSAL: Dispose of at a supervised incineration facility or an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal.
EMPTY CONTAINER: Rinse drums with a suitable solvent and steam to remove vapors before disposal or reuse in accordance with applicable regulations
Observe all federal, state, and local regulations when disposing of this substance.

14. TRANSPORT INFORMATION

SHIPPING NAME: Not regulated
DOT Proper Shipping Name Not regulated by this mode of transportation
IMO Proper Shipping Name Not regulated for this mode of transportation
IATA Proper Shipping Name Not regulated by this mode of transportation
AFI Prop. Shipping Name Not regulated by this mode of transportation

ID Number: Not applicable
HAZARD CLASS: Not applicable
PACKING GROUP: Not applicable
LABELING REQUIREMENTS: Not applicable

PACKING AUTHORIZATIONS:
EXCEPTIONS: Not applicable
NON-BULK PACKING: Not applicable

VESSEL STOWAGE
REQUIREMENTS: Not applicable
EMERGENCY GUIDE NUMBER: Not applicable
IMO PSN Code Not Applicable
DOT PSN Code Not applicable
IATA PSN Code Not Applicable
AFI PSN Code Not Applicable

15. REGULATORY INFORMATION

EUROPEAN COMMUNITY
EEC HAZARD PICTOGRAMS AND CLASSIFICATION

H319: Causes serious eye irritation

PRECAUTIONARY STATEMENTS:
P 264: Wash hands thoroughly after handling.
P 280: Wear protective glasses with splash shields or safety goggles/shield.
P305 + P351 + P338
Rinse eyes cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P 313
If irritation continued get prompt qualified medical attention.

EUROPEAN COMMUNITY REGULATORY: All intentional ingredients are listed on the European's EINECS Inventory.
16. OTHER INFORMATION

Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. It is the users’ responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

ZIRAX LLC reserves the right to refuse shipment of this product to any customer who fails to demonstrate the ability to consistently handle and use it safely and in compliance with all applicable laws, rules and regulations. Such demonstration may require on-site inspection of any or all storage, processing, packaging and other handling systems that come in contact with it.