Richest Group
No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Tel: 0086 21 5017 5386
E-mail: inquiry@richest-group.com
Web: www.richest-group.com

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Calcium Chloride Anhydrous	**Revision date:** 2026-10-29	**Version:** 1.0	**Brand:** Richest

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

Product name	Calcium Chloride Anhydrous
Synonyms	Calcium dichloride; Calcium chloride anhydrous
CAS No.	10043-52-4
EC No.	233-140-8
Molecular formula	CaCl2
Molecular weight	110.98 g/mol
Relevant identified uses	Weighting agent and shale inhibitor for drilling and completion fluids; de-icing and dust control; desiccant; food additive; concrete accelerator.
Uses advised against	None
Company	Richest Group Ltd.
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Telephone	+86 21 5017 5386
WhatsApp	+86 13472638548
E-mail	inquiry@richest-group.com
Website	www.richest-group.com
Emergency telephone number	+86 13472638548

SECTION 2: Hazards identification

GHS Classification	Eye Irrit. 2
Pictogram(s)	GHS07 (Exclamation mark)
Signal word	Warning
Hazard statement(s)	H319 Causes serious eye irritation.
Precautionary statement(s)	P264 Wash hands thoroughly after handling. P280 Wear eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for

	several
Other hazards	None known.

SECTION 3: Composition/information on ingredients

Component	Calcium chloride
CAS No.	10043-52-4
EC No.	233-140-8
Classification	Eye Irrit. 2; H319
Concentration (%)	≥94.0 %

SECTION 4: First aid measures

If inhaled	Remove person to fresh air and keep comfortable for breathing. If breathing is difficult or irritation persists, seek medical attention.
In case of skin contact	Take off contaminated clothing. Wash with soap and plenty of water. If irritation occurs, seek medical advice.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
If swallowed	Rinse mouth. Do NOT induce vomiting. Seek medical attention if large amounts are swallowed or if you feel unwell.
Most important symptoms and effects	Causes serious eye irritation. Skin contact may cause irritation; ingestion may cause gastrointestinal irritation, nausea and vomiting.
Indication of any immediate medical attention	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	The product is non-flammable. Use extinguishing media appropriate to the surrounding fire: water spray, foam, dry powder, carbon dioxide (CO2).
Unsuitable extinguishing media	None.
Special hazards arising from the chemical	May emit hydrogen chloride gas and calcium oxide fumes on strong heating.
Advice for firefighters	Wear self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Avoid dust formation and inhalation of dust. Avoid contact with eyes. Wear appropriate personal protective equipment (see section 8).
Environmental precautions	Prevent further leakage or spillage. Do not let large quantities enter drains or waterways.
Methods and materials for containment and cleaning up	Sweep up and shovel into suitable, dry, closed containers for disposal (product is hygroscopic). Flush residues with water.

SECTION 7: Handling and storage	
Precautions for safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation and contact with eyes. Provide adequate ventilation.
Conditions for safe storage, including any incompatibilities	Hygroscopic: store in tightly closed containers in a cool, dry and well-ventilated place. Keep away from moisture.

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	No occupational exposure limits established
Biological limit values	No biological exposure index (BEI) established.
Appropriate engineering controls	Ensure adequate ventilation. Use local exhaust ventilation where dust is generated.
Eye/face protection	Tightly fitting safety goggles or safety glasses with side-shields.
Skin protection	Handle with impervious gloves. Wash and dry hands after use.
Body protection	Wear appropriate protective clothing.
Respiratory protection	In case of dust formation, wear a suitable particulate respirator.
Thermal hazards	No specific thermal hazards under normal conditions of use.

SECTION 9: Physical and chemical properties	
Physical state	White hygroscopic powder or prills
Colour	White
Odour	Odourless
Melting point / freezing point	772 °C
Boiling point or initial boiling point	Approx. 1,935 °C

and boiling range	
Flammability	Non-flammable
Lower and upper explosion limit / flammability limit	Not applicable (non-flammable inorganic salt)
Flash point	Not applicable
Auto-ignition temperature	Not applicable (non-flammable)
Decomposition temperature	Does not decompose below the boiling point; may release hydrogen chloride on strong heating in presence of moisture
pH	7.5-9.5 (aqueous solution)
Kinematic viscosity	Not applicable (solid)
Solubility	745 g/l in water (20 °C), very soluble
Partition coefficient n-octanol/water	Not applicable (inorganic salt)
Vapour pressure	Negligible (solid at room temperature)
Density and/or relative density	2.15 g/cm3 (20 °C)
Relative vapour density	Not applicable (non-volatile solid)
Particle characteristics	White powder or prills; hygroscopic, deliquescent

SECTION 10: Stability and reactivity

Reactivity	Hygroscopic; dissolves in water with evolution of heat.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Decomposes on heating producing toxic and corrosive fumes of chlorine. The solution in water is a weak base. Attacks zinc in the presence of water producing flammable/explosive hydrogen gas. Dissolves violently in water with liberation of much heat. (ICSC 1184)
Conditions to avoid	Moisture (hygroscopic).
Incompatible materials	Strong acids; moisture.
Hazardous decomposition products	Hydrogen chloride gas (on strong heating).

SECTION 11: Toxicological information

Acute toxicity - Oral / Inhalation / Dermal	LD50 Oral - Rat - 2,301 mg/kg; LD50 Dermal - Rabbit - > 5,000 mg/kg
Skin corrosion/irritation	May cause skin irritation; prolonged contact with concentrated solutions may

	cause irritation
Serious eye damage/irritation	Causes serious eye irritation (rabbit)
Respiratory or skin sensitization	Not a sensitizer
Germ cell mutagenicity	Not mutagenic in in-vitro assays (Ames test negative)
Carcinogenicity	Not listed by IARC, NTP, ACGIH or OSHA as a carcinogen
Reproductive toxicity	Not classified (based on available data)
STOT - single exposure	Not classified (based on available data)
STOT - repeated exposure	Not classified (based on available data)
Aspiration hazard	Not classified (based on available data)

SECTION 12: Ecological information

Toxicity to fish / daphnia / algae	LC50 - Pimephales promelas (fathead minnow) - 8,350-10,650 mg/l - 96 h; EC50 - Daphnia magna (Water flea) - 2,400 mg/l - 48 h; low acute toxicity to aquatic organisms, dissociates to Ca2+ and Cl- ions naturally present in the environment
Persistence and degradability	Inorganic substance; biodegradation not applicable. Dissociates in water to calcium and chloride ions.
Bioaccumulative potential	Not applicable (inorganic ionic substance; no bioaccumulation expected)
Mobility in soil	Highly soluble in water; mobile in soil as dissociated ions
Other adverse effects	Large spills may increase the salinity of receiving waters

SECTION 13: Disposal considerations

Product disposal methods	Dispose of contents in accordance with local, regional and national regulations. Offer surplus and non-recyclable product to a licensed disposal company.
Contaminated packaging	Dispose of as unused product or in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods

Packing group	Not regulated as dangerous goods
Environmental hazards (Marine pollutant)	No
Special precautions for user	No special precautions required during transport.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	EINECS: Listed; TSCA (USA): Listed; IECSC (China): Listed; DSL (Canada): Listed; AICS (Australia): Listed.

SECTION 16: Other information

Full text of H-Statements	H319 Causes serious eye irritation.
Revision date	2026-10-29
Version	1.0

Abbreviations and acronyms: CAS: Chemical Abstracts Service; EC: European Commission; EINECS: European Inventory of Existing Commercial Chemical Substances; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Regulation concerning the International Carriage of Dangerous Goods by Rail; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; TWA: Time Weighted Average; STEL: Short Term Exposure Limit; LD50: Lethal Dose 50%; LC50: Lethal Concentration 50%; EC50: Effective Concentration 50%; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; SDS: Safety Data Sheet.

References: ECHA - European Chemicals Agency, https://echa.europa.eu/; IPCS - International Chemical Safety Cards (ICSC), http://www.ilo.org/; HSDB - Hazardous Substances Data Bank; eChemPortal - OECD Global Portal to Information on Chemical Substances; ERG - Emergency Response Guidebook by U.S. DOT.

Disclaimer: The information in this SDS is only applicable to the specified product and is provided in good faith. It is based on the knowledge available to Richest Group Ltd. at the date of issue and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute any guarantee of the properties of the product. Richest Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.