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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Calcium Hypochlorite 70% Sodium Process Granular	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

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

Product name	Calcium Hypochlorite 70% Sodium Process Granular
Synonyms	Calcium oxychloride; Chlorinated lime; HTH; High-test hypochlorite; Cal hypo 70
CAS No.	7778-54-3
EC No.	231-908-7
Molecular formula	Ca(ClO)2 / CaCl2O2
Molecular weight	142.98 g/mol
Relevant identified uses	Chlorinating and disinfection agent for drinking-water and municipal water treatment where appropriately approved; Swimming-pool and recreational-water sanitiser formulation; Industrial water, wastewater and cooling-water treatment; Bleaching and sanitation applications under controlled professional use
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
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Telephone	0086 21 5017 5386
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SECTION 2: Hazards identification

GHS Classification	Oxidising solid Category 2; acute oral toxicity Category 4; skin corrosion Category 1B; aquatic acute hazard Category 1
Pictogram(s)	GHS03, GHS05, GHS07, GHS09
Signal word	Danger
Hazard statement(s)	H272 May intensify fire; oxidiser; H302 Harmful if swallowed; H314 Causes severe skin burns and eye damage; H400 Very toxic to aquatic life; EUH031 Contact with acids liberates toxic gas; EUH071 Corrosive to the respiratory tract; EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine)
Precautionary statement(s)	P210; P220; P221; P260; P264; P270; P273; P280; P301+P312; P301+P330+P331; P303+P361+P353; P304+P340; P305+P351+P338; P310; P370+P378; P391; P405; P501
Other hazards	An oxidizer that promotes combustion; Decomposes in the presence of heat, water, or contamination with release of corrosive chlorine gas; Calcium hypochlorite solutions are corrosive to the skin, eyes, and upper respiratory tract; [CHEMINFO] See Hypochlorous acid.

SECTION 3: Composition/information on ingredients	
Component	Calcium Hypochlorite 70% Sodium Process Granular
CAS No.	7778-54-3
EC No.	231-908-7
Classification	Oxidising solid Category 2; acute oral toxicity Category 4; skin corrosion Category 1B; aquatic acute hazard Category 1
Concentration	Available chlorine ≥70%; this is not a claim of 70% pure Ca(ClO)2

SECTION 4: First-aid measures	
If inhaled	Move immediately to fresh air and keep at rest. Obtain urgent medical attention because inhalation may damage the respiratory tract; provide oxygen only by trained personnel.
In case of skin contact	Remove contaminated clothing immediately and flush skin with plenty of water. Obtain immediate medical attention and decontaminate clothing before reuse or disposal.
In case of eye contact	Flush immediately and continuously with water for several minutes, removing contact lenses if easy to do. Obtain immediate medical attention.
If swallowed	Rinse mouth and do not induce vomiting. Give nothing by mouth to an unconscious person and obtain immediate medical attention.
Most important symptoms and effects	No data available
Indication of immediate medical attention	Treat symptomatically. Show this safety data sheet to medical personnel.

SECTION 5: Fire-fighting measures	
Suitable extinguishing media	Personnel protection: ... Wear positive pressure self-contained breathing apparatus when fighting fires involving this material. /Chlorinated lime, liquid/
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	Excerpt from ERG Guide 140 [Oxidizers]:
Advice for firefighters	Excerpt from ERG Guide 140 [Oxidizers]:

SECTION 6: Accidental release measures	
Personal precautions and emergency procedures	Avoid contact with the material. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Environmental precautions	Prevent uncontrolled release to drains, soil and watercourses.
Methods for containment and cleaning up	Evacuate unnecessary personnel and avoid breathing dust or fumes. Wear full chemical protection and respiratory protection as required. Keep away from acids, organics and combustible materials; collect with clean, dry, non-combustible equipment into a dedicated labelled container. Do not return spilled or contaminated product to the original drum, prevent entry into drains and waterways, and never mix with other products.

SECTION 7: Handling and storage	
Precautions for safe handling	Use only with adequate ventilation and keep containers closed when not in use. Avoid dust, contact and contamination. Use clean, dry dedicated equipment; never mix with acids, ammonia, other pool chemicals or cleaning products. Wash thoroughly and keep away from food and drink.

SECTION 7: Handling and storage

Conditions for safe storage, including incompatibilities	Store tightly closed in a cool, dry, well-ventilated and dedicated area, protected from sunlight, heat and additional moisture. Segregate from acids, ammonia, reducing agents, oils, organic/combustible materials and other incompatible chemicals; never return spilled material to the original container.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	No data available
Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	Provide local exhaust ventilation for dust and corrosion-resistant handling equipment. Safety shower and eyewash must be immediately accessible.
Eye/face protection	Excerpt from ERG Guide 140 [Oxidizers]:
Skin and body protection	Excerpt from ERG Guide 140 [Oxidizers]:
Respiratory protection	Use suitable respiratory protection if exposure limits may be exceeded or dust, mist or vapour is generated.
Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties

Physical state	White or light-grey granular solid
Colour	WHITE GRANULES OR PELLETS
Odour	Strong chlorine odor
Melting point / freezing point	100 °C
Boiling point / boiling range	Decomposes at 100 °C
Flammability	Excerpt from ERG Guide 140 [Oxidizers]:
Explosion / flammability limits	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	Decomposes at 100 °C
pH	11.6–12.0 for a 10% solution
Viscosity	Not applicable to the neat solid; solution viscosity depends on concentration, temperature and test method.
Solubility	21% in water at 25 °C; Solubility in water, g/100ml at 25 °C: 21
Partition coefficient n-octanol/water	No data available
Vapour pressure	No data available
Density and/or relative density	1.0–1.1 g/mL
Relative vapour density	No data available
Particle characteristics	White or light-grey granular solid
Available chlorine	≥70%
Moisture	5.5–10%

SECTION 9: Physical and chemical properties	
Water solubility	180 g/L at 20°C; the product reacts in water and can release chlorine
Granularity	14–50 mesh: ≥90%
Moisture	4-10%
Available chlorine	≥70%
Refractive index	Index of refraction: 1.545 (alpha); 1.69 (beta)

SECTION 10: Stability and reactivity	
Reactivity	Water soluble. Slowly decomposes in water and moist air to liberate oxygen.
Chemical stability	chemical_stability: Stable when stored uncontaminated under recommended cool, dry conditions; available chlorine decreases with age and adverse storage.
Possibility of hazardous reactions	BLEACHING POWDER is a strong oxidizing agent and a base. Acts in aqueous solution by releasing hypochlorite ion (OCl- ion). Decomposes on standing to give oxygen (a strong oxidizing agent) and calcium chloride. Mixing of bleaching powder (hypochlorite solution) with ammonia solutions produces toxic/explosive ammonia trichloride vapors.
Conditions to avoid	Heat, sunlight, additional moisture, contamination and damaged or unvented packaging.
Incompatible materials	Acids, ammonia and ammonium compounds, reducing agents, organic materials, oils, greases, combustible materials and other reactive cleaning or water-treatment products.
Hazardous decomposition products	Decomposes at 100 °C

SECTION 11: Toxicological information	
Acute oral ld50	850 mg/kg (rat), reported in the AGent SDS
Acute effects	Harmful if swallowed, corrosive to skin and eyes, and corrosive to the respiratory tract. Acid contact can release toxic chlorine gas.
Other endpoints	No additional numerical chronic-toxicity endpoint is asserted in this reference record.
Skin corrosion irritation	No data available
Acute toxicity	LD50 Rat (male) oral 790 mg/kg; LD50 Rat oral 850 mg/kg; LD50 Rabbit dermal >2000 mg/kg
Toxicological summary	/SIGNS AND SYMPTOMS/ When excess of calcium hydroxide is present, chlorinated lime is strongly alkaline & capable of causing lime burn of the eye. /Chlorinated lime/
Health effects	Excerpt from ERG Guide 140 [Oxidizers]:

SECTION 12: Ecological information	
Fish lc50	0.057 mg/L, 96 h (bluegill), reported in the AGent SDS
Daphnia ec50	0.067 mg/L, 48 h (Daphnia magna), reported in the AGent SDS
Hazard	Very toxic to aquatic life; prevent discharge and contain contaminated runoff.
Ecotoxicity	LC50; Species: Colinus virginianus (Northern bobwhite quail) age 9 days; diet >5620 ppm for 8 days; LC50; Species: Anas platyrhynchos (Mallard duck) age 10 days; diet >5620 ppm for 8 days

SECTION 13: Disposal considerations

Product disposal methods	Treat residues and contaminated packaging as oxidising, corrosive hazardous waste. Use an authorised contractor and comply with local regulations. Do not mix with other waste, return contaminated product to stock containers, or discharge to drains and waterways.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	2880
UN Proper Shipping Name	CALCIUM HYPOCHLORITE, HYDRATED MIXTURE (5.5–10% water)
Transport hazard class(es)	5.1
Packing group	II
Environmental hazards / Marine pollutant	Yes; marine pollutant, very toxic to aquatic life
Special precautions for user	Keep dry and away from heat, acids, organic/combustible materials and other chemicals. Protect packaging from damage and contamination; do not transport leaking or contaminated packages.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	identity: Calcium hypochlorite, CAS 7778-54-3, EC 231-908-7; commercial sodium-process hydrated mixture; standard: GB/T 10666-2019 is a supplier-declared reference; the public typical composition table and final Richest COA must be checked for conformity.; use_restrictions: Drinking-water, pool and biocidal uses are subject to destination-market product registration, dosing and label requirements.; customs: HS 28281000 / 2828100000 is indicative and requires destination customs confirmation.

SECTION 16: Other information

Full text of H-Statements	H272 May intensify fire; oxidiser; H302 Harmful if swallowed; H314 Causes severe skin burns and eye damage; H400 Very toxic to aquatic life; EUH031 Contact with acids liberates toxic gas; EUH071 Corrosive to the respiratory tract; EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine)
Revision date	2026-11-16
Version	1.0
References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: Super Chlorine Granular Calcium Hypochlorite 70% Sodium Process: https://www.sinochlorine.com/showroom/super-chlorine-granular-calcium-hypochlorite-70-sodium-process.html | Safety Data Sheet: Calcium Hypochlorite: https://www.agentsales.com.au/sds/pdf/calcium-hypochlorite.pdf | UNICEF procurement and transport notice for calcium hypochlorite: https://www.ungm.org/Public/Notice/206281 | UN/NA 2880 transport information: https://cameochemicals.noaa.gov/unna/2880 | Calcium Hypochlorite product standard information: https://www.kfchem.com/products_D/39.html | PubChem Calcium hypochlorite (CID 24504): https://pubchem.ncbi.nlm.nih.gov/compound/24504
Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.

SECTION 16: Other information

Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.