Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: Calcium hypochlorite.
Other means of identification: /
Recommended use of the chemical and restrictions on use:
Supplier's details:
Emergency phone number:

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:
Oxidizing solids Category 2
Acute toxicity, oral Category 4
Skin corrosion/irritation Category 1B
Serious eye damage/eye irritation Category 1
Hazardous to the aquatic environment, acute hazard Category 1
GHS Label elements, including precautionary statements:
Symbol:

Signal word: Danger
Hazard statement(s): May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damage. Very toxic to aquatic life.
Precautionary statement(s):
Prevention:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash …thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dusts or mists. Avoid release to the environment.
Response:
In case of fire: Use water spray, foam or dry powder to extinguish. If swallowed: Get medical help. Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately. Specific treatment (see under for further information). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help. Collect spillage.
Storage:
Store locked up.
Disposal:
Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration
Calcium hypochlorite	7778-54-3	94%
Water	7732-18-5	5.5%

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: Quickly leave and move to a place with fresh air. Keep the airway unobstructed. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration immediately. Consult a physician immediately.

In case of skin contact: Take off contaminated clothing immediately and rinse with plenty of running water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of running water for at least 15 minutes and consult a physician immediately.

If ingestion: Rinse mouth with water. Do not induce vomit. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Use water spray, etc.

Special hazards arising from the chemical: This material is non-flammable. It can decompose at high temperature and heat and help other substances burn.

Special protective actions for fire-fighters: Firefighters must wear air breathing apparatus, fire-fighting suits and protective gloves to extinguish in the upwind direction. Whenever possible, remove the container from the fire to open space and use spray water to cool unopened containers.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: It is recommended that emergency personnel wear protective masks and fire protective overalls. Do not touch the spill directly.

Environmental precautions: Isolate contaminated areas and restrict access.

Methods and materials for containment and cleaning up: Small amount of leakage: Avoid dusting, use a clean shovel to collect in a dry, clean, covered container and transfer to a safe place. Do not allow products to enter restricted areas such as sewers. A large amount of leakage: Cover with plastic sheeting and canvas. Use a non-sparking tool to collect the waste or transport it to a waste disposal site for disposal.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: There should be sufficient local exhaust in workplace. Operators should be trained and strictly follow the operating procedures. Operators are advised to wear protective masks, corrosion-resistant protective clothing and rubber gloves. Operators should load and unload lightly during handling to prevent damage to the package. There should be leakage treatment equipment in workplace. There may be harmful residues in empty containers.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well-ventilated warehouse. Keep away from fire and heat. Protect from direct sunlight. The package should be sealed and not exposed to moisture. It should be stored separately from reducers, flammable materials, etc., and should not be mixed. The storage area should be provided with suitable materials to contain spills.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: /

Appropriate engineering controls: Close strictly and provide sufficient local exhaust.

Individual protection measures

Eye/face protection: Wear a protective mask.

Skin protection: Wear corrosion-resistant protective clothing.

Respiratory protection: A dust mask (full face mask) must be worn when exposed to dust. Air respirators should be worn during emergency rescue or evacuation.

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid granule.
Colour	White.
Odour	/
Melting point/freezing point	/
Boiling point or initial boiling point and boiling range	/
Flammability	/
Lower and upper explosion limit/flammability limit	/
Flash point	/
Auto-ignition temperature	/
Decomposition temperature	/
pH	/
Kinematic viscosity	/
Solubility	Soluble in water.
Partition coefficient: n-octanol/water (log value)	/
Vapour pressure	/
Density and/or relative density	/
Relative vapour density	/
Particle characteristics	/

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: The material is stable in normal temperature.

Possibility of hazardous reactions: Decomposes rapidly above 175°C. Decomposes rapidly on contact with acids. This produces chlorine and oxygen. This generates fire and explosion hazard. The substance is a strong oxidant. It reacts violently with combustible and reducing materials. The solution in water is a medium strong base. Reacts violently with ammonia, amines, nitrogen compounds and many other substances. This generates explosion hazard. Attacks many metals. This produces flammable/explosive gas hydrogen. Attacks plastics.

Conditions to avoid: Spark, high temperature and static electricity.

Incompatible materials: Oxidizers and flammable materials.

Hazardous decomposition products: Oxycarbides, chlorides, etc.

Section 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Ingestion (swallowing), skin/eye exposure and inhalation.
Symptoms related to the physical, chemical and toxicological characteristics:
Acute health effects:
Ingestion can cause symptoms such as burning, nausea, vomiting and abdominal pain.
Skin contact can cause redness, pain and burn.
Inhalation can cause cough, throat pain and burn.
Eyes contact can cause irritation, pain and burn.
Chronic health effects: /
Numerical measures of toxicity (such as acute toxicity estimates):
Calcium hypochlorite:
LD50(oral, rat): 790 mg/kg

Section 12 ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available):
Calcium hypochlorite:

Endpoint	Test Duration (hr)	Species	Value
NOEC(ECx)	24h	Fish	<0.01mg/l
EC50	72h	Algae or other aquatic plants	0.221-0.305mg/l
LC50	96h	Fish	0.115-0.376mg/l
EC50	48h	Crustacea	0.157-0.186mg/l
EC50	96h	Algae or other aquatic plants	6.11mg/l

Persistence and degradability: Low (Calcium hypochlorite).
Bioaccumulative potential: Low (Calcium hypochlorite).
Mobility in soil: Low (Calcium hypochlorite).
Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Dispose this product by safe burial. Damaged containers are prohibited from being reused and should be buried in the prescribed place.

Section 14 TRANSPORT INFORMATION

UN number: 2880.
UN proper shipping name: CALCIUM HYPOCHLORITE, HYDRATED or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, with not less than 5.5% but not more than 16% water.
Transport hazard class(es): 5.1.
Packing group, if applicable: II.
Environmental hazards: Marine pollutant.
Special precautions for user: /
Transport in bulk according to IMO instruments: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012, GB/T 15098-2008, GBZ 2.1-2019, GBZ 2.2-2007 as well as the following

regulations: Railway Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
Form Date	18-Sep-2021

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer/supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.