# Calcium chloride chemical safety data sheet MSDS

#### Part 1: Chemical name

Chinese name of the chemical: calcium chloride English name of the chemical: calcium chloride

Technical data sheet code: CAS No.: 10043-52-4

Molecular formula: CaCl<sub>2</sub> Molecular weight: 110.99

### Part 2: Ingredients/composition information

Ingredients: Pure product Content: 74%/94%

CAS No.: 10043-52-4

### Part 3: Hazard Overview

Intrusion route: Dust inhalation, ingestion

Health hazards: Dust can burn, irritate the nasal cavity, mouth, and throat, and can also cause nose bleeding and damage nasal tissue; dry powder can irritate the skin, and the solution can

severely irritate or even burn the skin

Environmental hazards:

Explosion hazard: Non-flammable

#### Part 4: First aid measures

Skin contact: Take off contaminated clothing and rinse with plenty of running water.

Eye contact: Lift the eyelids and rinse with flowing water or saline. Seek medical attention.

Inhalation: Leave the scene to a place with fresh air. If breathing is difficult, give oxygen. Seek

medical attention.

Ingestion: Drink plenty of warm water and induce vomiting. Seek medical attention.

# Part 5: Firefighting measures

Hazardous characteristics: This product is non-flammable.

Hazardous combustion products:

Firefighting methods: Firefighters must wear gas masks and full-body firefighting suits. Fire extinguishing agents: Mist water, foam, dry powder, carbon dioxide, sand and soil.

### Part 6: Leakage emergency treatment

Emergency treatment: Isolate the leakage contaminated area and restrict access. Avoid dust, sweep it up carefully, put it in a bag and transfer it to a safe place or transport it to a waste disposal site for disposal.

### Part 7: Operation, disposal and storage

Operation precautions: Closed operation, strengthen ventilation. Operators must be specially trained and strictly abide by the operating procedures. It is recommended that operators wear

self-priming filter dust masks to avoid dust. Load and unload gently during transportation to prevent damage to the packaging and containers.

Storage precautions: Store in a cool and ventilated warehouse. The packaging container must be sealed to prevent moisture. Separate from deliquescent items.

# **Part 8: Contact Control/Personal Protection**

Engineering Control: The production process is closed and ventilation is strengthened.

Respiratory System Protection: When the dust concentration in the air exceeds the standard, a self-priming filter dust mask must be worn. When rescuing or evacuating in an emergency, an air respirator should be worn.

Eye Protection: Wear safety glasses.

Body Protection: Wear protective work clothes.

Hand Protection: Wear rubber gloves.

Other Protection: Change and wash work clothes in time. Maintain good hygiene habits.

### **Part 9: Physical and Chemical Properties**

Main Ingredients: Pure product

Appearance and properties: White powder, block, flake.

Melting point ( $^{\circ}$ C): 782 Boiling point ( $^{\circ}$ C): 1600

Relative density (water = 1): 2.152

Solubility: Soluble in water.

Main Uses: Used as a multi-purpose desiccant, an important refrigerant, a building antifreeze, a

coagulant in food, and a calcium enhancer.

Other physical and chemical properties:

# Part 10: Stability and reactivity

Stability: Stable

Prohibited materials: Mixture of bromine trifluoride, carbonic acid and lime

# Part 11: Toxicological information

Acute toxicity:

Subacute and chronic toxicity:

Irritation: Irritating to the nasal cavity, mouth and throat, and can also cause nose bleeding and

damage to nasal tissue

Sensitization:

### Part 12: Ecological information

Ecotoxicological toxicity:

Biodegradability:

Non-biodegradability:

Biological enrichment or bioaccumulation:

Other harmful effects: No information.

# Part 13: Waste disposal

Waste properties:

Waste disposal methods: Refer to relevant national and local regulations before disposal.

Waste precautions: Place in a bag and transfer to a safe place or transport to a waste treatment

site for disposal

#### Part 14: Transportation information

Dangerous goods number: No information

UN number: No information

Packaging mark: Packaging category:

Packaging method: No information.

Transport precautions: The packaging should be complete and the loading should be secure when shipping. During transportation, ensure that the container does not leak, collapse, fall, or become damaged. It is strictly forbidden to mix and transport with deliquescent substances, edible chemicals, etc. During transportation, it should be protected from exposure to sunlight and rain. The vehicle should be thoroughly cleaned after transportation.

# Part 15: Regulatory Information

Regulatory Information Regulations on the Safety Management of Hazardous Chemicals (issued by the State Council on February 17, 1987), Implementation Rules of the Regulations on the Safety Management of Hazardous Chemicals (Hua Lao Fa [1992] No. 677), Regulations on the Safe Use of Chemicals in the Workplace (Ministry of Labor [1996] No. 423) and other regulations have made corresponding provisions for the safe use, production, storage, transportation, loading and unloading of hazardous chemicals.