



Material Safety Data Sheet (MSDS) for Calcium Chloride

Section 1: Product Identification

Product Name: Calcium Chloride
Chemical Formula: CaCl_2
CAS Number: 10043-52-4
Synonyms: Calcium dichloride

Section 2: Hazard Identification

Classification: Corrosive to metals, Eye damage, Skin corrosion/irritation, Serious eye damage/eye irritation, Acute toxicity (oral, dermal, inhalation), Specific target organ toxicity (single exposure), Respiratory or skin sensitization, Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity, STOT (repeated exposure), Aspiration hazard.

Signal Word: Danger

Hazard Statements:

Causes severe skin burns and eye damage.

May cause respiratory irritation.

May cause genetic defects.

May cause cancer.

May damage fertility or the unborn child.

Causes damage to organs (lung) through prolonged or repeated exposure.

Section 3: Composition/Information on Ingredients

Chemical Name: Calcium Chloride
CAS Number: 10043-52-4
Concentration: 100%

Section 4: First Aid Measures

Inhalation: Move to fresh air. If breathing is difficult, give oxygen.

Skin Contact: Wash skin with plenty of water. Remove contaminated clothing.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Seek medical attention immediately.



Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, or foam.

Special Firefighting Procedures: Wear full protective clothing and self-contained breathing apparatus.

Section 6: Accidental Release Measures

Personal Precautions: Wear protective equipment. Avoid dust formation.

Environmental Precautions: Do not allow to enter drains or watercourses.

Section 7: Handling and Storage

Handling: Avoid contact with skin and eyes. Use only in well-ventilated areas.

Storage: Store in a cool, dry place. Keep container tightly closed.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Use local exhaust ventilation.

Personal Protective Equipment:

Eyes/Face: Wear chemical splash goggles and face shield.

Skin: Wear protective gloves and clothing.

Respiratory: Use NIOSH-approved respiratory protection.

Section 9: Physical and Chemical Properties

Appearance: White, solid flakes or pellets

Odor: Odorless

Melting Point: 772°C (1,422°F)

Boiling Point: 1,935°C (3,515°F)

Solubility: Soluble in water

Section 10: Stability and Reactivity

Stability: Stable under normal conditions.

Incompatibility: Avoid contact with acids, alkalis, and oxidizing agents



Section 11: Toxicological Information

Acute Toxicity: LD50 Oral (rat): 1,400 mg/kg

Section 12: Ecological Information

Ecotoxicity: LC50 (96h) fish: >1,000 mg/L

Section 13: Disposal Considerations

Dispose of in accordance with local, regional, and national regulations.

Section 14: Transport Information

UN Number: 2331

Shipping Name: Calcium Chloride, Solid

Class: 8 (Corrosive)

Section 15: Regulatory Information

Consult local regulations for specific requirements.

Section 16: Other Information

This MSDS is prepared in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200.