

Safety Data Sheet (SDS)

Product Name: Calcium Chloride
CAS Number: 10043-52-4
EC Number: 233-140-8
Molecular Formula: CaCl₂
Molecular Weight: 110.98 g/mol

1. Identification

Product identifier

Calcium Chloride

Synonyms

Calcium chloride anhydrous
Calcium dichloride
CaCl₂

Recommended use

Laboratory chemical, analytical reagent, calibration material, technical compound for research and laboratory use.

Supplier

Rexar
Genestetstraat 3
2394 XK Hazerswoude Rijndijk
Netherlands
info@rexar.nl

2. Hazard Identification

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Eye Irritation, Category 2

Signal word

Warning

Hazard statements

H319 Causes serious eye irritation

Precautionary statements

P264 Wash hands thoroughly after handling
P280 Wear protective gloves and eye protection
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes

3. Composition / Information on Ingredients

Substance

Calcium Chloride

CAS Number

10043-52-4

EC Number

233-140-8

Purity

Typically $\geq 96\%$

4. First Aid Measures

General advice

Remove contaminated clothing. Seek medical advice if symptoms persist.

Inhalation

Move person to fresh air.

Skin contact

Wash skin thoroughly with soap and water.

Eye contact

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

Ingestion

Rinse mouth with water. Seek medical advice if discomfort occurs.

5. Fire Fighting Measures

Suitable extinguishing media

Water spray, dry chemical powder, carbon dioxide or foam.

Specific hazards

Thermal decomposition may produce hydrogen chloride and calcium oxides.

Protective equipment

Wear self-contained breathing apparatus.

6. Accidental Release Measures

Personal precautions

Avoid dust formation and use appropriate PPE.

Environmental precautions

Prevent large quantities from entering waterways.

Methods for cleanup

Sweep up material and place in suitable disposal container.

7. Handling and Storage

Handling

Handle in accordance with good laboratory practice. Avoid contact with eyes.

Storage

Store in a cool, dry and well-ventilated area. Protect from moisture. Keep container tightly closed.

8. Exposure Controls / Personal Protection

Eye protection

Safety glasses or chemical splash goggles

Skin protection

Protective gloves

Respiratory protection

Dust mask recommended when dust is generated.

9. Physical and Chemical Properties

Appearance

White hygroscopic powder, granules or flakes

Odor

Odorless

Melting point

772 °C

Boiling point

1935 °C

Density

2.15 g/cm³

Solubility

Highly soluble in water

10. Stability and Reactivity**Stability**

Stable under recommended storage conditions.

Conditions to avoid

Exposure to moisture and excessive heat.

Incompatible materials

Strong acids and strong oxidizing agents.

Hazardous decomposition products

Hydrogen chloride and calcium oxides.

11. Toxicological Information**Acute toxicity**

Not classified as acutely toxic.

Skin irritation

May cause mild irritation.

Eye irritation

Causes serious eye irritation.

12. Ecological Information**Ecotoxicity**

No significant environmental hazard expected at normal laboratory quantities.

Persistence and degradability

Naturally occurring inorganic salt.

13. Disposal Considerations

Dispose of material in accordance with local, regional and national regulations through licensed chemical waste handlers.

14. Transport Information

UN number

Not regulated for transport.

Transport hazard class

Not classified as dangerous goods for ADR, IMDG or IATA.

15. Regulatory Information

Classification according to EU CLP Regulation (EC) No. 1272/2008.

Eye Irritation Category 2 – H319

16. Other Information

This Safety Data Sheet is provided for laboratory safety guidance.

The product is supplied as a chemical substance for analytical, technical or research applications only.

Not intended for human or animal consumption or for medical use.