



Material Safety Data Sheet (MSDS / SDS)

Calcium Carbonate (CaCO₃)

1. Identification of the Substance / Company

Product Name: Calcium Carbonate

Chemical Name: Calcium Carbonate

Formula: CaCO₃

CAS Number: 471-34-1

HS Code: 28365000

Recommended Use:

Filler, extender, and additive in plastics, paints, rubber, construction, drilling fluids, and industrial applications.

Email: info@treeq.ae

Website: www.basekim.com

2. Hazard Identification

Classification (GHS):

Not classified as hazardous under GHS.

Label Elements:

- No hazard pictogram required
- Signal Word: Not applicable

Hazard Statements:

- Not considered hazardous under normal conditions

Precautionary Statements:

- Avoid breathing dust
- Use adequate ventilation
- Wear protective equipment when necessary

3. Composition / Information on Ingredients

Component	CAS Number	Concentration
-----------	------------	---------------

Calcium Carbonate (CaCO ₃)	471-34-1	≥ 98%
--	----------	-------

Impurities: Trace amounts of silica, magnesium carbonate, or other minerals may be present.

4. First Aid Measures

Inhalation:

Move to fresh air. Seek medical attention if irritation persists.

Skin Contact:

Wash with soap and water. No significant irritation expected.

Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes. Seek medical advice if irritation continues.

**Ingestion:**

Rinse mouth. Drink water. Seek medical advice if large quantities are ingested.

5. Fire-Fighting Measures**Suitable Extinguishing Media:**

Water spray, foam, dry chemical, CO₂

Specific Hazards:

Not flammable. At high temperatures (>825°C), decomposes to calcium oxide and CO₂.

Protective Equipment:

Standard firefighting equipment

6. Accidental Release Measures**Personal Precautions:**

- Avoid dust inhalation
- Use PPE (mask, gloves)

Environmental Precautions:

- Avoid release into waterways in large quantities

Cleanup Method:

- Sweep or vacuum material
- Avoid creating dust
- Dispose according to local regulations

7. Handling and Storage**Handling:**

- Avoid dust formation
- Use local exhaust ventilation
- Wear appropriate PPE

Storage:

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

8. Exposure Controls / Personal Protection**Exposure Limits:**

(Typical guidelines)

- OSHA PEL (Total Dust): 15 mg/m³
- OSHA PEL (Respirable): 5 mg/m³

Engineering Controls:

- Dust extraction systems
- Adequate ventilation

Personal Protective Equipment (PPE):

- Respiratory Protection: Dust mask (if needed)
- Eye Protection: Safety goggles



- Skin Protection: Gloves (optional)

9. Physical and Chemical Properties

Property	Value
Appearance	White powder
Odor	Odorless
pH	8.5 – 9.5
Melting Point	Decomposes
Density	~2.7 g/cm ³
Solubility	Insoluble in water
Boiling Point	Not applicable

10. Stability and Reactivity

Stability:

Stable under normal conditions

Conditions to Avoid:

High temperatures (>825°C)

Incompatible Materials:

Strong acids (reacts to release CO₂)

Decomposition Products:

Calcium oxide (CaO), Carbon dioxide (CO₂)

11. Toxicological Information

Acute Toxicity:

Low toxicity

Inhalation:

Dust may cause mild irritation

Skin Contact:

Non-irritating

Eye Contact:

May cause mechanical irritation

Chronic Effects:

Prolonged inhalation of dust may affect respiratory system

12. Ecological Information

Ecotoxicity:

Not harmful to aquatic life

Persistence & Degradability:

Naturally occurring mineral

Bioaccumulation:

Not expected



13. Disposal Considerations

- Dispose in accordance with local regulations
- Non-hazardous waste
- Avoid large-scale release into environment

14. Transport Information

UN Number: Not regulated

Transport Class: Not hazardous

Packing Group: Not applicable

Safe for transport by road, sea, and air.

15. Regulatory Information

- Not classified as hazardous under GHS
- Complies with major chemical safety regulations

16. Other Information

This MSDS is based on current knowledge and is intended for guidance in safe handling, use, processing, storage, and disposal.