

Zinc Carbonate MSDS

1. Product Name and Identification

Product Name: [Zinc Carbonate](#)

Synonyms: Zinc Carbonate Hydroxide, Carbonic Acid Zinc Salt

Product CAS Number: 3486-35-9

Recommended Use: Commonly used in industrial applications such as pigments, cosmetics, ceramics, and as a feed additive.

Manufacturer/Distributor: [Insert Manufacturer Details Here]

Emergency Contact: [Insert Emergency Contact Information Here]

2. Composition/Ingredients

Chemical Name: Zinc Carbonate

CAS Number: 3486-35-9

Chemical Formula: $ZnCO_3$

Molecular Weight: 125.39 g/mol

Percentage Composition: 100% Zinc Carbonate (in pure form).

Impurities/Additives: None reported (if applicable, specify here).

3. Hazards Identification

Classification of the Substance:

- Not classified as a hazardous substance under GHS.

Label Elements:

- **Signal Word:** None
- **Hazard Statements:**
 - May cause slight eye or respiratory irritation under certain conditions.

Precautionary Statements:

- **Prevention:**
 - Avoid creating excessive dust.
 - Wash hands thoroughly after handling.
- **Response:**

- IF INHALED: Move person to fresh air and monitor for breathing difficulties.
- IF IN EYES OR ON SKIN: Rinse with water to remove material.
- **Storage and Disposal:**
 - Store in a dry, well-ventilated area in a tightly sealed container.

Other Hazards:

Fine particulates may cause mechanical irritation to the respiratory system if inhaled in large quantities.

4. First Aid Measures

General Advice:

Seek professional medical advice if adverse symptoms persist.

- **Eye Contact:** Flush eyes immediately with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Seek medical attention if irritation develops.
 - **Skin Contact:** Wash exposed areas with soap and water. Remove and wash contaminated clothing before reuse. Seek medical advice for persistent irritation.
 - **Inhalation:** Move the exposed person to fresh air. Keep them in a comfortable position and watch for signs of breathing difficulties. Seek medical attention if respiratory issues persist.
 - **Ingestion:** Rinse the mouth with water. Do not induce vomiting unless advised to do so by a medical professional. Contact medical services immediately.
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5. Handling and Storage

Handling:

- Handle in a well-ventilated area to prevent dust accumulation.
- Avoid inhalation of dust, and avoid contact with the skin and eyes.
- Wear appropriate personal protective equipment (PPE) during handling.

Storage:

- Store in a tightly sealed container in a cool, dry area away from moisture.
- Keep away from strong acids and incompatible materials.
- Ensure proper labeling and secure storage to prevent accidental exposure.

6. Exposure Controls/Personal Protection

Control Parameters:

- **Exposure Limits:** No specific occupational exposure limits are established but ensure to minimize dust exposure.

Engineering Controls:

- Use a local exhaust system or general room ventilation to reduce excessive dust levels.
- Install eyewash stations and safety showers in the work area.

Personal Protective Equipment (PPE):

- **Eye/Face Protection:** Use safety glasses with side shields or goggles.
- **Skin Protection:** Wear protective gloves (PVC, nitrile) to prevent skin exposure.
- **Respiratory Protection:** Use an appropriately fitted respirator if dust levels exceed the recommended limits.

7. Physical and Chemical Properties

- **Appearance:** White powder or crystalline solid
- **Odor:** Odorless
- **Odor Threshold:** Not applicable
- **pH:** Basic when dissolved in water
- **Melting Point:** Decomposes before melting
- **Boiling Point:** Not applicable (decomposes before boiling)
- **Solubility:** Insoluble in water; soluble in dilute acids
- **Density:** ~4.4 g/cm³
- **Flash Point:** Not flammable
- **Flammability:** Non-flammable
- **Vapor Pressure:** Not applicable
- **Viscosity:** Not applicable

8. Stability and Reactivity

Stability:

Stable when stored and handled under recommended conditions.

Reactivity:

- Reacts with strong acids to produce carbon dioxide gas.

Hazardous Reactions:

- None under normal handling and storage conditions.

Decomposition Products:

Decomposes at high temperatures into zinc oxide (ZnO) and carbon dioxide gas (CO₂).

Conditions to Avoid:

Avoid exposure to heat, moisture, and strong acids.

Incompatible Materials:

Reacts with strong acids and strong oxidizing agents.

9. Toxicological Information

Acute Toxicity:

- **Oral:** LD50 (rat): >5000 mg/kg (low toxicity).
- **Dermal:** Not classified as a skin irritant; prolonged exposure may cause slight irritation.
- **Inhalation:** Dust inhalation may irritate the respiratory tract with excessive exposure.

Chronic Effects:

No evidence of chronic toxicity under normal handling conditions.

Skin and Eye Exposure:

- Skin contact may cause mild irritation after prolonged exposure.
- Eye contact may result in minor irritation.

Carcinogenicity:

No evidence of carcinogenic activity for zinc carbonate.

Other Information:

- Safe handling practices can minimize any potential risks associated with this substance.
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10. Disposal Considerations

- Dispose of in accordance with local, state, and federal regulations.
 - Avoid discharge into drains, waterways, or the environment.
 - Waste material should be stored in a properly labeled container and sent to an approved waste disposal facility.
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