



RXSOL

CHEMO PHARMA INTERNATIONAL

Technical Data Sheet (TDS)

RXSOL-81-8109-025
Calcium Carbonate

Description

Calcium Carbonate (Ground) – Mesh 200 is a high-purity, finely ground mineral offering excellent whiteness, chemical stability, and low moisture content. With customizable particle sizes and environmentally friendly properties, it enhances product performance while maintaining high workability and durability. It is widely used in construction, paints, coatings, plastics, rubber, paper, agriculture, and pharmaceuticals. The product is non-toxic, non-flammable, and chemically stable under normal conditions.

Advantages

- High purity (99% CaCO₃) and consistent quality.
- Excellent whiteness and brightness for superior finish.
- Chemically stable and non-reactive.
- Environmentally friendly and non-toxic.
- Improves strength, opacity, and surface smoothness.
- Available in multiple mesh sizes and customized grades.
- Reduces manufacturing costs by replacing costlier raw materials.
- Non-flammable and safe for industrial applications.

Fields of Application

Calcium Carbonate is widely used across different industries as a multifunctional additive and filler. Its excellent physical and chemical characteristics make it ideal for the following sectors:

- **Construction:** Used in cement, asphalt, and building materials to enhance strength, workability, and durability.
- **Paints & Coatings:** Improves opacity, whiteness, and surface finish.
- **Plastics:** Enhances mechanical strength, dimensional stability, and thermal resistance.
- **Rubber:** Improves flexibility, tensile strength, and resilience.
- **Paper Industry:** Provides brightness, smoothness, and opacity.
- **Agriculture:** Neutralizes acidic soils and provides calcium for plant growth.
- **Food & Pharmaceuticals:** Acts as a calcium supplement and acidity regulator.
- **Cosmetics:** Enhances texture, absorbs oil, and acts as a mild abrasive in powders and toothpaste.

Method of Use

1. **Dry Blending:** Mix the required quantity with other dry components until uniform.

- 2. **Wet Dispersion:** Gradually disperse under high-speed agitation for coatings, paints, or slurries.
- 3. **Dosage:** 5-50% depending on the formulation and desired properties.

Technical Specifications

Chemical Analysis	
CaCO ₃ (%)	99.00
CaO (%)	55.64
MgO (%)	0.46
Fe ₂ O ₃ (Max. %)	0.02
Al ₂ O ₃ (Max. %)	<0.5
SiO ₂ (Max. %)	0.07
HCl Insoluble (%)	<0.5
Loss on Ignition (%)	43.75

Physical Properties	
Whiteness (%)	95-96
Brightness (%)	95-96
Moisture (%)	<0.3
pH (1% Solution)	8-9
Hardness (MOHS)	3
Oil Absorption (ml oil/100g)	10-12

Particle Data / General Data	
Mean Grain Size D50 (μ)	3.86
Top Cut D97 (μ)	18.22
Specific Gravity (g/cm ³)	2.71
Bulk Density (g/cm ³)	2.71
Appearance	White Powder

Dosage

Application Type	Recommended Concentration
Paints & Coatings	5-30%
Plastic & Rubber Compounds	10-50%
Paper & Construction	10-40%

Application Type	Recommended Concentration
Cosmetics & Pharmaceuticals	2-10%

Specification

Appearance	White fine powder
Purity	99% min CaCO ₃
pH (1% solution)	8-9
Moisture	<0.3%
Mesh Size	200 Mesh (Custom sizes available)
Packaging	Order No: RXSOL-16-3005-025 Size: 25 Kg, 50 Kg PP Bags, 1 MT Jumbo Bags

Handling

Non-toxic and non-flammable material. Avoid inhalation of dust during handling. Use gloves, mask, and goggles. Store in a dry, ventilated area away from moisture and direct sunlight. In case of contact with eyes or skin, rinse thoroughly with water.

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