Calcium Silicate Powder

CAS Number: 1344-95-2

Calcium Silicate Powder is a fine, white, non-combustible mineral additive used as a functional filler and performance enhancer in plasterboard formulations. It provides excellent thermal stability, low density, and high fire resistance, making it well-suited for high-performance gypsum-based products. In plasterboard manufacture, it improves fire rating, dimensional stability, and mechanical strength while contributing to rigidity and surface finish.

KEY FEATURES

- Enhances fire resistance and thermal insulation in plasterboard
- Provides excellent dimensional stability and rigidity
- Low density for lightweight board production
- Non-combustible, chemically stable mineral filler
- Improves board surface quality and finish

APPLICATIONS

- Plasterboard core formulations to enhance fire rating and thermal insulation
- Lightweight drywall boards where reduced density and high stiffness are required
- High-temperature resistant boards for industrial or commercial building systems
- Dimensional stability enhancement to reduce warping and cracking in service
- Surface finish improvement when used as a fine mineral filler in board facings and joint compounds

TECHNICAL SPECIFICATIONS

Property	Typical Value
Appearance	White powder
pH (in water)	~7.5
Loss on Ignition (%)	Balance
Particle Size (sieve residue)	~0.7% retained on 60 mesh; ~9% retained on 325 mesh
Specific Gravity	~2.9
Thermal Stability	Stable > 1000 °C
SiO_2 (dry weight)	~54 %
CaO (dry weight)	~35 %
Combined SiO_2 + CaO	~97 %

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LIMITED WARRANTY INFORMATION.
PLEASE READ CAREFULLY.

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This document is subject to revision without notice as new data becomes available.

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PACKAGING

- Bulk bags
- 25 kg bags

STORAGE & HANDLING

Store in a cool, dry, and well-ventilated location away from moisture. Use dust control measures during handling. Appropriate PPE includes dust masks/respirators, safety glasses, and gloves. Avoid generating airborne dust.

SAFETY

Non-combustible and chemically stable. Inhalation of dust may cause temporary respiratory irritation. See SDS for full safety guidance.