



06 SILICA



PRODUCT DESCRIPTION

Silica (Silicon Dioxide - SiO₂) is a naturally occurring mineral known for its high hardness, chemical inertness, and thermal stability. It is widely used in glass, ceramics, foundry, construction, paints, polymers, and filtration industries.

CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
SiO ₂	98.0 - 99.5
Al ₂ O ₃	0.20 - 0.60
Fe ₂ O ₃	0.05 - 0.20
CaO	0.05 - 0.20
MgO	0.05 - 0.15
Na ₂ O	0.05 - 0.15
K ₂ O	0.05 - 0.20
TiO ₂	0.01 - 0.05
L.O.I (Loss on Ignition)	0.10 - 0.50




PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	—	White crystalline powder / granules
SiO ₂ Content	%	≥ 98
Hardness (Mohs)	—	7
Bulk Density	g/cm ³	1.4 - 1.7
Specific Gravity	g/cm ³	2.60 - 2.65
Moisture Content	%	≤ 0.5
Melting Point	°C	1710
Refractoriness	°C	≥ 1650
pH (10% Slurry)	—	6.5 - 7.5
Particle Size	—	As per customer requirement

APPLICATIONS

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GLASS INDUSTRY
 Used as a major raw material in the production of flat glass, container glass, crystal glass, and fiberglass.
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CERAMICS INDUSTRY
 Used in ceramic bodies, floor & wall tiles, sanitary ware, and porcelain to improve strength and whiteness.
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FOUNDRY INDUSTRY
 Used in molding sands and core making for high refractoriness and thermal stability.
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PAINTS & COATINGS
 Used as an extender, anti-settling agent, and to improve hardness and scratch resistance.
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PLASTICS & RUBBER
 Improves mechanical strength, abrasion resistance, and dimensional stability.
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FILTRATION & WATER TREATMENT
 Used in water filters, sand filters, and industrial filtration media.

AVAILABLE FORMS & PARTICLE SIZES

							
LUMP 10 - 50 mm	GRANULAR 2 - 10 mm	10 MESH 2.00 mm	30 MESH 600 µm	100 MESH 150 µm	200 MESH 75 µm	325 MESH 45 µm	400 MESH 38 µm

i Other sizes available upon request.

PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag



GLASS INDUSTRY

CERAMICS INDUSTRY

FOUNDRY INDUSTRY

PAINTS & COATINGS

PLASTICS & RUBBER

WATER TREATMENT