

Fused Silica

Description: Fused silica, also known as quartz glass, is a high-purity amorphous silica material produced from selected natural quartz stone. The raw material is electrically fused at 1800–2200°C and naturally cooled to form vitreous, amorphous silicon dioxide (SiO₂). The resulting fused-silica lumps are manually sorted into grades, then processed through crushing, screening, iron removal, grinding and other dedicated processing stages.

Fused silica features an extremely low coefficient of thermal expansion, excellent thermal-shock resistance, high-temperature stability and good chemical resistance. It is widely used in precision casting, investment-casting shells, refractory materials, foundry applications, ceramics, semiconductor processing and other high-temperature industrial applications.

Chemical Composition (%)

Parameter	Req.	Grade A	Grade B
SiO ₂	≥	99.92–99.97	99.85–99.88
Al ₂ O ₃	≤	150 ppm	300 ppm
Fe ₂ O ₃	≤	30 ppm	50 ppm
Magnetic material	≤	0.02	0.02
Crystalline silica	≤	0.1	0.1
LOI	≤	0.1	0.1

Physical Properties

Parameter	Grade A	Grade B
Bulk density (g/cm ³)	2.19–2.21	2.19–2.21

Product Information

Size	0–1 / 1–3 / 3–5 / 5–8 mm; –60 / –200 / –325 mesh.
Packing	In 25 kg bags in bulk bags, or as per request.
Origin	Jiangsu Province, China.