

Bubble Alumina

Description: Bubble alumina is a lightweight refractory aggregate with excellent high-temperature resistance and energy-saving thermal-insulation properties. It remains stable in various furnace atmospheres and is particularly suitable for kilns and furnaces operating at temperatures up to 1800°C.

It is produced by melting alumina in an electric arc furnace and blowing the molten material with compressed air. Its low density, closed-cell structure and high-temperature resistance make it suitable as insulating fill for high-temperature furnaces and as premium aggregate for lightweight refractory castables and insulating shapes.

For furnace-insulation fill, low Na₂O content is critical to reduce the risk of collapse. For insulating bricks, balanced sphere-wall thickness provides structural support without sacrificing insulation performance. For conventional castables, the appropriate grade should be selected according to the required service temperature.

Chemical Composition (%)

Parameter	Req.	BA	Typical
Al ₂ O ₃	≥	99	99.59
Fe ₂ O ₃	≤	0.15	0.2
SiO ₂	≤	0.15	0.06
Na ₂ O	≤	0.3	0.09

Physical Properties

Parameter	BA 99	
Bulk density (size-dependent) (g/cm ³)	0.40–1.00	0.77–0.89
Breakage (%)	8%	4%
Melting Point	1800 °C	1800 °C

Product Information

Size	Mixed grade: 0.2–5 mm; screened grades: 0.2–0.5, 0.5–1, 1–2, 2–3 and 3–5 mm.
Packing	In 600, 750, 900 or 1,000 kg bulk bags, or as requested.
Origin	Henan Province, China.