

White Fused Alumina Abrasive

White fused alumina is a high-purity aluminum oxide abrasive material produced by fusing alumina in an electric arc furnace. The sharp, angular grains of this material provide excellent cutting performance in precision grinding, polishing, and lapping applications, and it is also a component in refractory linings.



Product Overview

High-Purity Industrial Abrasive

White Fused Alumina is a premium-grade abrasive material produced by melting high-quality alumina in an electric arc furnace at temperatures exceeding 2000°C. Composed primarily of alpha-Al₂O₃, this material is celebrated for its exceptional hardness and chemical stability. It serves as an essential component in refractory applications, furnace burdens, and high-performance abrasive tools.

Physical Properties

Key Physical Metrics

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Mohs Hardness

3.95 g/cm³

Specific Gravity

1.85 g/cm³

Bulk Density

Chemical Composition

Chemical Purity Standards

Component	Section Sand Purity	Fine Powder Purity
Al ₂ O ₃	99.5% min	99.0% min
Fe ₂ O ₃	0.04% max	0.20% max
Na ₂ O	0.30% max	0.40% max
SiO ₂	0.02% max	0.05% max

Available Grits

Available Particle Sizes

- Section Sand: 12-6mm, 10-8mm, 8-5mm, 6-3mm, 5-3mm, 3-1mm, 1-0mm, 1-0.5mm, 0.5-0.2mm, 0.5-0mm, 0.3-0mm
- Fine/Macro Powder: 60mesh-0, 80mesh-0, 100mesh-0, 120mesh-0, 150mesh-0, 200mesh-0, 325mesh-0

Applications

Primary Applications

Refractory, Furnace Burden, Castable, Ramming Compound, Painting