

White Fused Alumina Abrasive

White fused alumina is a high-purity aluminum oxide abrasive material produced in an electric arc furnace. It is known for its hardness, sharpness, and wear resistance, making it suitable for grinding wheels, coated abrasives, and polishing compounds.



Product Overview

High-Purity White Fused Alumina

White Fused Alumina (Al₂O₃) is a premium abrasive produced by melting high-quality alumina in electric arc furnaces at temperatures exceeding 2000 degrees Celsius. This material is defined by its exceptional hardness (9.0 Mohs) and high purity, making it ideal for precision applications including grinding, blasting, and refractory production. Its alpha-Al₂O₃ crystal structure ensures consistent performance and durability across diverse industrial surface treatments.

Physical Properties

Key Physical Characteristics

9

Mohs Hardness

3.95 g/cm³

Specific Gravity

1.85 g/cm³

Average Bulk Density

Technical Composition

Chemical Composition Limits

Grade Category	Al ₂ O ₃ Min %	Fe ₂ O ₃ Max %
Refractory Grade	99.5	0.04
Powder Grade	99	0.2
Abrasive Grain	99.2	0.08

Application Domains

Suitable Industries

Refractory, Abrasives, Ceramics, Surface Treatment, Polishing, Rust Removal, Floor Coating

Sizing & Granularity

Available Standards

FEPA • JIS