



ABRASIVE

White Aluminium Oxide

White Aluminum Oxide delivers high-density, low-porosity abrasive performance with superior thermal shock resistance.



White Aluminum Oxide (White Fused Alumina) is manufactured from imported high-quality alumina, melted above 2000 °C in an electric arc furnace. The result is a pure white abrasive with the main crystal phase $\alpha\text{-Al}_2\text{O}_3$.

Material produced in a tilting furnace offers high bulk density and low porosity, enhancing volume stability and thermal shock resistance for demanding industrial applications.

Performance

- **Crystal Phase:** Pure $\alpha\text{-Al}_2\text{O}_3$ ensures hardness and durability
- **Bulk Density:** High density improves abrasive efficiency
- **Porosity:** Low porosity enhances stability and reduces breakdown
- **Thermal Resistance:** Superior thermal shock resistance for high-temperature applications

Features

- **Purity:** Manufactured from high-quality alumina, ensuring consistent performance
- **Strength:** High hardness and wear resistance
- **Stability:** Maintains volume integrity under thermal stress
- **Versatility:** Suitable for abrasive, refractory, and protective applications



Major Industries & Applications

Abrasives

Grinding, polishing, lapping

Refractories

High-temperature linings

Armor

Body and vehicle protection

Blasting Media

Surface preparation

Medical

Microdermabrasion

Industrial

Metal prep, anti-slip, laminates, coatings, filtration, milling

Chemical Composition (Typical)

	Brown	White	Pink
Al₂O₃	94.5 -97%	>99%	>99%
TiO₂	1.5 – 3.8%	N/A	N/A
Fe₂O₃	<0.5%	<0.1%	N/A
SiO₂	<1.5%	<0.1%	<0.1%
CaO	<0.6%	<0.1%	<0.1%
Na₂O	N/A	0.35%	0.35%
Cr₂O₃	N/A	N/A	0.35%

Available Sizes

Grade	Microns	Grade	Microns
8	2360 - 2800	46	355 - 425
10	2000 - 2360	60	250 - 300
12	1700 - 2000	80	180 - 212
14	1400 - 1700	100	125 - 150
16	1400 - 1180	120	106 - 125
20	1000 - 1180	150	75 - 106
24	710 - 850	180	63 - 90
30	600 - 710	220	53 - 75
36	500 - 600	240	53 - 75

Physical Characteristics (Typical)

Bulk Density	2.4 T/M ³
Hardness (Mohs)	9
Shape	Angular, Blocky
Specific Gravity	3.9 to 3.95
Melting Point	Approx. 1850°C
Colour	Brown / White / Pink

Other sizes available on request

Packaging

25 kg bags packed in 1 MT bulk bag