

FUSED WHITE ALUMINUM OXIDE (AL₂O₃)

White Fused Aluminum Oxide is a high purity fused aluminum oxide. It achieves its white color as it is lower in impurities than brown or pink fused aluminum oxide. It typically has higher friability than brown fused aluminum oxide. With a Mohs hardness of 9, Aluminum Oxide is a high strength, wear-resistant material possessing a strong ability to resist vigorous chemical attacks (such as acid and alkali) at extreme temperatures. Its high degree of refractoriness, along with its superior electrical insulating properties, dielectric properties, and high melting point make White Fused Aluminum Oxide a desirable material choice for a diverse range of applications.

Panadyne offers a full range of aluminas to meet your application. Our Aluminum Oxide is offered in standard FEPA grading or custom sizing. The white fused aluminum oxide is available in acid washed, non-acid washed, and microdermabrasion grade.



TYPICAL APPLICATIONS

Refractories	Polishing	Coatings
Body and Vehicle Armor	Lapping	Filtration
Blasting Media	Metal Preparation	Abrasives
Microdermabrasion	Anti-Slip	Refractory
Grinding	Laminates	Milling

TYPICAL PROPERTIES

High Hardness
High Compression Strength
Abrasion/ Wear-Resistance
Abrasives
Chemical Inertness
High Degree of Refractoriness
Superior Electrical Insulating Properties
Dielectric Properties
High Melting Point



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Sizes

White Aluminum Oxide is graded to ANSI Standards Table 2 or FEPA sized. The following Grit are available:

Macro grades

ANSI or FEPA F 8, 10, 12, 14, 16, 20, 24, 30, 36, 46, 54, 60, 70, 80, 90, 100, 120, 150, 180, 220, 240.

Micro grades

FEPA sized 280,320,360,400,500,600,800,1000,1200.



TYPICAL ANALYSIS

AlO ₃	99.5%
TiO ₂	0.0995%
SiO ₂ (not free)	0.05%
Fe ₂	0.08%
MgO	0.02%
Alkali (Soda & Potash)	0.30%
Crystal Form	Rhombohedral Class
Chemical Nature	Amphoteric
Specific Gravity	3.95 gm/cc
Bulk Density	116 lbs/ ft ³
Hardness	KNOPPS = 2000, MOHS = 9
Melting Point	2,000°C
Reaction with Acids	Subject to mild attack by aqua regia and/or Hydrofluic