

# GRAYSTAR LLC

A Manufacturer and Distributor of  
Abrasive Materials and Specialty Products

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## Technical Data Sheet

**Product: White Fused Aluminum Oxide (Macrogrits) - Bonded Abrasives and General Industrial (Including Pressure Blasting)**

**Description:** White aluminum oxide is a high purity abrasive electrically fused from Bayer processed alumina. This product is ideal for applications that require minimal foreign contamination or higher friability than regular brown fused aluminum oxide.

**Applications:** White Fused Aluminum Oxide Macrogrits are used for all kinds of bonded abrasives; e.g. surface grinding, external and internal cylindrical grinding, creepfeed grinding of low or unalloyed steel, etc. General industrial applications include pressure blasting, microderm abrasion, anti-skid, and lapping.

**Typical Chemical Analysis:**

Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	99.78%
Sodium Oxide (Na <sub>2</sub> O)	0.16%
Silicon Dioxide (SiO <sub>2</sub> )	0.02%
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.04%

**Physical Characteristics:**

Crystal Form:	Alpha-Alumina
True Density:	3.95 g/cm <sup>3</sup>
Hardness:	Knoop (100) 2000 kg/mm, Mohs 9.0
Melting Point:	2000°C
Color:	White

**ANSI Test Methods:**

Chemistry:	B74.14
Sizing:	B74.12
Bulk Density:	B74.4

**Packaging & Shipping:**

Warehousing in Bluffton, SC and Niagara Falls, NY  
50 lb. paper bags  
400 lb. fiber drums (grade sizes 8 – 240)  
2000 lb. supersacks  
Plastic pails, etc. for a surcharge (SC only)

**Bulk Density (g/cm<sup>3</sup>):**

Grit	BD	Grit	BD
8	-	60	1.63 - 1.73
10	-	70	1.62 - 1.72
12	1.78 – 1.88	80	1.59 - 1.69
14	1.78 – 1.88	90	1.58 - 1.68
16	1.78 – 1.88	100	1.55 - 1.65
20	1.78 – 1.88	120	1.52 - 1.62
24	1.77 - 1.87	150	1.50 - 1.60
30	1.75 - 1.85	180	1.46 - 1.56
36	1.73 - 1.83	220	1.44 - 1.54
46	1.70 - 1.80	240	1.43 - 1.53
54	1.66 - 1.76		

**Certifications Available:**

ANSI and FEPA  
Agency and Mil-specs