



AL – WHITE FUSED ALUMINUM OXIDE

WHITE FUSED ALUMINA (AL₂O₃) FOR BONDED ABRASIVES

ABOUT:

AL is a white fused aluminum oxide obtained from the fusion of calcined alumina in electric arc furnaces. AL presents high purity and high capacity of edge reposition. AL is recommended for special applications where contamination is an issue to be considered.

TYPICAL CHEMICAL ANALYSIS

Al ₂ O ₃	99.42%
Fe ₂ O ₃	0.03
Na ₂ O	0.43

TYPICAL PHYSICAL PROPERTIES

Crystal Structure:	α-alumina
Knoop 100 Hardness:	1900 kg/cm ²
Toughness:	38% (ANSI-B74.8 R2007)
Specific Gravity:	3.94 g/cc

TYPES OF TREATMENT

Treatment	SHAPE	
	Block	Super Block
Not Treated	AL R	ALHD R
Red Coated (RC)*	ALRC R	ALHDRC R
Silane Treated (ST)*	ALST R	ALHDST R

Grit Size	BULK DENSITY (g/cc)		Grit Size	R	HD
	R	HD			
10	1.74 - 1.84	1.81 - 1.91	50	1.68 - 1.78	1.75 - 1.85
12	1.74 - 1.84	1.81 - 1.91	60	1.67 - 1.77	1.73 - 1.83
14	1.74 - 1.84	1.81 - 1.91	70	1.62 - 1.72	1.73 - 1.83
16	1.73 - 1.83	1.80 - 1.90	80	1.61 - 1.71	1.73 - 1.83
20	1.72 - 1.82	1.79 - 1.89	90	1.58 - 1.68	1.69 - 1.79
24	1.72 - 1.82	1.79 - 1.89	100	1.57 - 1.67	1.73 - 1.83
30	1.72 - 1.82	1.79 - 1.89	120	1.55 - 1.65	1.73 - 1.83
36	1.71 - 1.81	1.78 - 1.88	150	1.52 - 1.62	1.70 - 1.80
40	1.70 - 1.80	1.77 - 1.87	180	1.52 - 1.62	1.70 - 1.80
46	1.70 - 1.80	1.77 - 1.87	220	1.48 - 1.58	1.70 - 1.80

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*Treatment (RC or ST) can affect bulk density by ± 0.05 g/cm³

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Updated: 04/13



AL — WHITE FUSED ALUMINUM OXIDE

WHITE FUSED ALUMINA (AL₂O₃) MICROGRITS FOR BONDED ABRASIVES

ABOUT:

AL is a white fused aluminum oxide obtained from the fusion of calcined alumina in electric arc furnaces. AL presents high purity and high capacity of edge reposition. AL is recommended for special applications where contamination is an issue to be considered.

TYPICAL CHEMICAL ANALYSIS

Al ₂ O ₃	99.16%
Fe ₂ O ₃	0.08
Na ₂ O	0.59

TYPICAL PHYSICAL PROPERTIES

Crystal Structure:	α-alumina
Knoop 100 Hardness:	1900 kg/cm ²
Specific Gravity:	3.94 g/cc

GRIT SIZE SPECIFICATIONS

Grit	Ds3 Maximum	Ds50		Ds94 Minimum
		Minimum	Maximum	
F230	82.0	50.0	56.0	34.0
F240	70.0	42.5	46.5	28.0
F280	59.0	35.0	38.0	22.0
F320	49.0	27.7	30.7	16.5
F360	40.0	21.3	24.3	12.0
F400	32.0	16.30	18.30	8.0
F500	25.0	11.8	13.8	5.0
F600	19.0	8.3	10.3	3.0
F800	14.0	5.5	7.5	2.0
F1000	10.0	3.7	5.3	1.0
F1200	7.0	2.5	3.5	1.0

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*Other grit sizes available upon request

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