



## SFAR — BROWN ALUMINUM OXIDE

### SEMI-FRIABLE BROWN FUSED ALUMINA (AL<sub>2</sub>O<sub>3</sub>) FOR COATED ABRASIVES

#### ABOUT:

SFAR is a semi-friable brown fused aluminum oxide obtained from the fusion of high purity bauxites in electric arc furnaces. In order to improve its quality this material is calcined and present low dust content. It is recommended for high performance coated abrasives.

#### TYPICAL CHEMICAL ANALYSIS

Al <sub>2</sub> O <sub>3</sub>	97.64%
TiO <sub>2</sub>	1.43
SiO <sub>2</sub>	0.53
Fe <sub>2</sub> O <sub>3</sub>	0.12

#### TYPICAL PHYSICAL PROPERTIES

Specific Gravity:	4.01 g/cc
Knoop 100 Hardness:	1900 kg/cm <sup>2</sup>
Toughness:	42% (ANSI-B74.8 R2007)

#### TYPES OF TREATMENT

Treatment	SHAPE
	Angular
Not Treated	SFAR L
Red Coated (RC)*	SFARRC L
Silane Treated (ST)*	SFARST L

#### BULK DENSITY (g/cc)

Grit Size	L	Grit Size	L
12	1.74 - 1.84	60	1.64 - 1.74
16	1.74 - 1.84	80	1.60 - 1.70
20	1.74 - 1.84	100	1.55 - 1.65
24	1.72 - 1.82	120	1.54 - 1.64
30	1.70 - 1.80	150	1.54 - 1.64
36	1.69 - 1.79	180	1.52 - 1.62
40	1.68 - 1.78	220	1.48 - 1.58
50	1.67 - 1.77		

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\*Treatment (RC or ST) can affect bulk density by ± 0.05 g/cm<sup>3</sup>

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## SFAR – BROWN ALUMINUM OXIDE

### SEMI-FRIABLE BROWN FUSED ALUMINA (AL<sub>2</sub>O<sub>3</sub>) MICROGRITS FOR COATED ABRASIVES

#### ABOUT:

SFAR is a semi-friable brown fused aluminum oxide obtained from the fusion of high purity bauxites in electric arc furnaces. SFAR presents good toughness and excellent abrasion properties. It is recommended for high performance coated abrasives.

#### TYPICAL CHEMICAL ANALYSIS

Al <sub>2</sub> O <sub>3</sub>	96.79%
TiO <sub>2</sub>	1.94
SiO <sub>2</sub>	0.51
Fe <sub>2</sub> O <sub>3</sub>	0.25
MgO	0.16

#### TYPICAL PHYSICAL PROPERTIES

Specific Gravity:	4.05 g/cc
Knoop 100 Hardness:	1900 kg/cm <sup>2</sup>
Crystalline Structure:	α - Alumina

#### GRIT SIZE SPECIFICATIONS

Grit	Ds 0 (µm)	Ds 3 (µm)	Ds 50 (µm)		Ds 94 (µm)
	Maximum	Maximum	Minimum	Maximum	Minimum
F240	110.0	81.7	56.5	60.5	44.5
F280	101.0	74.0	50.2	54.2	39.2
F320	94.0	66.8	44.7	47.7	34.2
F360	87.0	60.3	39.0	42.0	29.6
F400	81.0	53.9	33.5	36.5	25.2
F500	77.0	48.3	28.7	31.7	21.5
F600	72.0	43.0	24.8	26.8	18.0
F800	67.0	38.1	20.8	22.8	15.1

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\*Other grit sizes available upon request

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