

## Technical Data Sheet of Brown fused alumina

### Brown Fused alumina

Brown Fused alumina belongs to the group of the electro-fused alumina.

Brown Fused alumina was produced by controlled melting of the calcined bauxite in an electric arc furnace.

Brown Fused alumina is iron-free and extremely tough.

### Applications

Reusable abrasive

Wear-resistant & refractory products

Grinding, lapping & polishing medium

Ceramic grinding wheels & grinding media

### Blasting systems

Pressure blast systems

Injection blast cabinets

### Typical Physical Properties

<b>Hardness</b>	9 mohs
<b>Grain shape</b>	Angular
<b>Melting Point</b>	1950 C min
<b>True density</b>	3.9-4.1g/cm <sup>3</sup>
<b>Bulk density</b>	1.5-2.1g/cm <sup>3</sup> (depends on the size)

### Typical Chemical Analysis

<b>Al<sub>2</sub>O<sub>3</sub></b>	94.55%
<b>TiO<sub>2</sub></b>	2.25%
<b>Fe<sub>2</sub>O<sub>3</sub></b>	0.1%
<b>SiO<sub>2</sub></b>	1.82%
<b>CaO</b>	0.30%
<b>NaO</b>	0.25%

## Typical Size

<b>F-macrogrits sizes bonded</b>	
<b>Grit designation</b>	<b>Mean diameter in um</b>
F4	4890
F5	4125
F6	3460
F7	2900
F8	2460
F10	2085
F12	1765
F14	1470
F16	1230
F20	1040
F22	885
F24	745
F30	625
F36	525
F40	438
F46	370
F54	310
F60	260
F70	218
F80	185
F90	154
F100	129
F120	109
F150	82
F180	69
F220	58

<b>F-MICROGRITS</b>	
<b>Grit designation</b>	<b>Mean grain size ds50-value in μm</b>
F 230	53.0 ± 3
F 240	44.5 ± 2
F 280	36.5 ± 1.5
F 320	29.2 ± 1.5
F 360	22.8 ± 1.5
F 400	17.3 ± 1
F 500	12.8 ± 1
F 600	9.3 ± 1
F 800	6.5 ± 1

<b>P-macrogrits sizes coated</b>	
<b>Grit designation</b>	<b>Mean diameter in um</b>
P12	1815
P16	1324
P20	1000
P24	764
P30	642
P36	538
P40	425
P50	336
P60	269
P80	201
P100	162
P120	125
P150	100
P180	82
P220	68

<b>P-microgrits sizes coated</b>	
<b>Grit designation</b>	<b>Mean grain size ds50-value in um</b>
P240	58.2±2
P280	52.2±2
P320	46.2±1.5
P360	40.5±1.5
P400	35.0±1.5
P500	30.2±1
P600	25.8±1
P800	21.8±1
P1000	18.3±1
P1200	15.3±1
P1500	12.6±1
P2000	10.3±0.8
P2500	8.4±0.5