

BROWN FUSED ALUMINA

Product Information



BFA used for Bonded Abrasives & Sandblasting Application

Brown Fused Alumina (also named as Brown Aluminum Oxide) is produced from high quality Bauxite, Coal, Iron chip being fused at high temperature in an electric arc furnace. Our BFA has high hardness(Mohs hardness 9.0), strong self-sharpening, high strength and toughness, excellent wear-resistance and chemical stability, which makes it an ideal abrasive materials, particularly suitable for manufacturing vitrified, resin and rubber bonded grinding wheel, cutting discs, drill points, or snagging wheels; for wood,metal or stone polishing or finishing; as fine blasting media, and anti-slip flooring application.



Different Melting and Process Methods

We manufacture BFA in Tilting furnace or Fixed furnace, BFA made in Tilting Furnace has higher Aluminum Oxide(Al_2O_3) content and lower impurities, which leads to higher strength and high-performance. BFA can be crushed and milled by Barmac Mill, Ball Mill or Roller Mill. We offer BFA with different grain shapes and bulk densities according to customer's needs. Barmac milling BFA is granted more round shape and higher bulk density. Abrasive tools made of it are more tough, abrasion-resistant and self-sharpening. If used for sandblasting, Barmac milling BFA can be recycled more times.

Physical Properties

Color	:	Brown or Grey
Friability	:	Semi-friable
Melting Point	:	2250°C
Bulk Density	:	1.50-2.10g/cm ³
True Density	:	3.95g/cm ³ Min
Mohs Hardness	:	9.0
Knoop (100) Hardness	:	2100kg/mm ²

Chemical Composition

Chemical Composition (% , by weight)

Sizes	Type &Grade		Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂	CAO
Macro F12-F220	Tilting furnace	A--A1	95.5%Min	<1.0%	<0.15%	<3.8%	0.25%
	Fixed furnace	A--A2	95.0%Min	<1.5%	<0.30%	<3.8%	0.40%
		A-B	90.0%Min	<3.00	<0.45	<4.00	<0.60

MICRO	F230-F1200	93.5%Min	<1.50	<0.30	<3.80	<0.40
Note: Custom chemistry is available upon request.						

Available Grit Sizes

We offer BFA in Macro and Micro grains complying with the current FEPA / JIS / ANSI sieve standards.

For Bonded Abrasives & Sandblasting Application:

FEPA F

Macro: F12, F24, F30, F36, F40, F46, F54, F60, F80, F100, F120, F150, F180, F220

Micro: F240, F280, F320, F360, F400, F500, F600, F800, F1000, F1200

*Custom sizes and shapes are also available upon request.

FEPA F12-F1200 Patical Size Distribution Chart

Macro Grits			Micro Grits (um)			
Grit	Average Grain Size (um)	Bulk Density (g/cm ³)	Grit	Ds3% Value Max.	D50% Value (um)	D94% Value Min.
F12	2000 – 1700	1.90-2.10	F230	82	53.0 ± 3	34
F14	1700 – 1400	1.89-2.05	F240	70	44.5 ± 2	28
F16	1400 – 1180	1.89-2.02	F280	59	36.5 ± 1.5	22
F20	1180 – 1000	1.89-1.99	F320	49	29.2 ± 1.5	16.5
F24	1000 – 850	1.88-1.98	F360	40	22.8 ± 1.5	12
F30	850 – 710	1.87-1.97	F400	32	17.3 ± 1	8
F36	710 – 600	1.83-1.93	F500	25	12.8 ± 1	5
F40	600 – 500	1.82-1.92	F600	19	9.3 ± 1	3
F46	500 – 425	1.78-1.88	F800	14	6.5 ± 1	2
F54	355 – 300	1.73-1.82	F1000	10	4.5 ± 0.8	1
F60	300 – 250	1.71-1.81	F1200	7	3.00	1(at 80%)
F70	250 – 212	1.66-1.76				
F80	212 – 180	1.66-1.74				
F90	180 – 150	1.63-1.72				
F100	150 – 125	1.63-1.71				
F120	125 – 106	1.60-1.70				
F150	150 – 75	1.58-1.68				
F180	90 – 63	1.58-1.68				
F220	75 – 53	1.58-1.65				
Note: Bulk density can be adjusted according to customer demand.						

Packaging

Standard Packaging:

- Big bags(1000kgs , 1250kgs, 1350kgs) with or without pallets;
- 20 or 25kg plastic.or paper bags, with or without pallets.

*Custom Packaging is available upon request.



Zhengzhou Jingcheng Abrasives Co.,Ltd

Email: sales@zzcabrasives.com

Tel /Fax : 0371-6397-7511, 0371-63977311

Wechat: YZ8100778

Website : <https://www.zzcabrasives.com>

ADD. : No.112 Wenhua Road, Zhengzhou City,China