



**Komeno**  
Grinding & Polishing Solutions

## **Komeno Abrasives**

Brown Fused Alumina



### **Product and Applications**

Brown Fused Alumina is made from reduced fusion of quality bauxite, iron and coal in electric arc furnace under 2500 degrees

### **Refractory**

Because of its high purity, high cleanliness, coarse grain, low magnetic contents, high density, high bulk density, chemical stability, low porosity rate, nice crystal structure, corrosion and acid resistant, no cracks, corrosion or spot during production of refractory products, is a mineral for shaped and unshaped refractory products in fire-proof, precision casting, foundry and coating industries.

### **Abrasive Tools and Sandblasting**

Brown Fused alumina made according to FEPA, JIS Standard etc. with its hardness, toughness, sharp edge and self-sharpening character, is an ideal synthetic abrasives material for production of abrasive tools, sand blasting and surface treatment.



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### Physical Specifications & Package

Specific Gravity :  $\geq 3.90 \text{ g / cm}^3$

Bulk Density :  $1.7\text{-}2.3 \text{ g / cm}^3$

Hardness : 9 MOSH

Color : Brown

Melting Point :  $2250^\circ\text{C}$

Sizes Available : F8-F220, F280-F2000, other sizes upon request

Package : Jumbo Bag, 25kg bag and 40bags on a Pallet

### Sizes(FEPA)

F8	2000-2800 $\mu\text{m}$	F46	300-425 $\mu\text{m}$
F10	1700-2360 $\mu\text{m}$	F54	250-355 $\mu\text{m}$
F12	1400-2000 $\mu\text{m}$	F60	212-300 $\mu\text{m}$
F14	1180-1700 $\mu\text{m}$	F70	180-250 $\mu\text{m}$
F16	1000-1400 $\mu\text{m}$	F80	150-212 $\mu\text{m}$
F20	850-1180 $\mu\text{m}$	F90	125-180 $\mu\text{m}$
F22	710-1000 $\mu\text{m}$	F100	106-150 $\mu\text{m}$
F24	600-850 $\mu\text{m}$	F120	90-125 $\mu\text{m}$
F30	500-710 $\mu\text{m}$	F150	63-106 $\mu\text{m}$
F36	425-600 $\mu\text{m}$	F180	63-90 $\mu\text{m}$
F40	355-500 $\mu\text{m}$	F220	53-75 $\mu\text{m}$

# Particle Distribution & Chemical Content



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## Brown Fused Alumina FEPA sizes(Fixed Furnace)

Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F12	+2.80	+2.00	+1.70	+1.40	-1.18	AL <sub>2</sub> O <sub>3</sub>	95.50%
	Standard	0%	0-20%	45-100%	70-100%	0-3%	SiO <sub>2</sub>	1.40%
	Sample 1	0	12	59	87	0.5	TiO <sub>2</sub>	2.39%
	Sample 2	0	12	59	87	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.17%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F14	+2.36	+1.70	+1.40	+1.18	-1.00	AL <sub>2</sub> O <sub>3</sub>	95.30%
	Standard	0%	0-20%	45-100%	70-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	5	62	91	0.5	TiO <sub>2</sub>	2.33%
	Sample 2	0	5	62	91	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.14%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F16	+2.00	+1.40	+1.18	+1.00	-0.85	AL <sub>2</sub> O <sub>3</sub>	95.45%
	Standard	0%	0-20%	45-100%	70-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	5	52	81	0.5	TiO <sub>2</sub>	2.33%
	Sample 2	0	5	52	81	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.14%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F20	+1.70	+1.18	+1.00	+0.85	-0.710	AL <sub>2</sub> O <sub>3</sub>	95.34%
	Standard	0%	0-20%	45-100%	70-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	8	56	88	0.5	TiO <sub>2</sub>	2.38%
	Sample 2	0	8	56	88	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.18%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F22	+1.40	+1.00	+0.85	+0.710	-0.600	AL <sub>2</sub> O <sub>3</sub>	95.37%
	Standard	0%	0-20%	45-100%	70-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	7	51	82	0.5	TiO <sub>2</sub>	2.30%
	Sample 2	0	7	51	82	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.15%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F24	+1.18	+0.85	+0.71	+0.60	-0.50	AL <sub>2</sub> O <sub>3</sub>	95.27%
	Standard	0%	0-25%	45-100%	65-100%	0-3%	SiO <sub>2</sub>	1.38%
	Sample 1	0	15	53	82	0.5	TiO <sub>2</sub>	2.34%
	Sample 2	0	15	53	82	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.14%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F30	+1.00	+0.71	+0.60	+0.50	-0.425	AL <sub>2</sub> O <sub>3</sub>	95.22%
	Standard	0%	0-25%	45-100%	65-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	16	57	76	0.5	TiO <sub>2</sub>	2.21%
	Sample 2	0	15	57	75	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.20%

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Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F36	+0.85	+0.60	+0.50	+0.425	-0.355	AL <sub>2</sub> O <sub>3</sub>	95.33%
	Standard	0%	0-25%	45-100%	65-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	6	50	88	0.5	TiO <sub>2</sub>	2.35%
	Sample 2	0	6	50	88	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.16%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F40	+0.710	+0.500	+0.425	+0.355	-0.300	AL <sub>2</sub> O <sub>3</sub>	95.20%
	Standard	0%	0-30%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	5	53	82	0.5	TiO <sub>2</sub>	2.29%
	Sample 2	0	5	53	82	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.14%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F46	+0.60	+0.425	+0.355	+0.300	-0.250	AL <sub>2</sub> O <sub>3</sub>	95.30%
	Standard	0%	0-30%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.37%
	Sample 1	0	4	45	85	0.5	TiO <sub>2</sub>	2.29%
	Sample 2	0	4	45	85	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.17%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F60	+0.425	+0.30	+0.25	+0.212	-0.18	AL <sub>2</sub> O <sub>3</sub>	95.25%
	Standard	0%	0-30%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.37%
	Sample 1	0	12	53	83	1.0	TiO <sub>2</sub>	2.28%
	Sample 2	0	12	53	83	1.0	Fe <sub>2</sub> O <sub>3</sub>	0.15%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F70	+0.355	+0.250	+0.212	+0.180	-0.150	AL <sub>2</sub> O <sub>3</sub>	95.18%
	Standard	0%	0-25%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.39%
	Sample 1	0	17	52	80	0.5	TiO <sub>2</sub>	2.30%
	Sample 2	0	17	52	80	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.12%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F80	+0.300	+0.212	+0.180	+0.150	-0.125	AL <sub>2</sub> O <sub>3</sub>	95.24%
	Standard	0%	0-25%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.40%
	Sample 1	0	21	45	75	0.5	TiO <sub>2</sub>	2.35%
	Sample 2	0	21	45	75	05	Fe <sub>2</sub> O <sub>3</sub>	0.18%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F90	+0.250	+0.180	+0.150	+0.125	-0.106	AL <sub>2</sub> O <sub>3</sub>	95.06%
	Standard	0%	0-20%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.33%
	Sample 1	0	9	52	87	0.5	TiO <sub>2</sub>	2.45%
	Sample 2	0	9	52	87	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.14%

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Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F100	+0.212	+0.150	+0.125	+0.106	-0.075	AL <sub>2</sub> O <sub>3</sub>	95.17%
	Standard	0%	0-20%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.38%
	Sample 1	0	13	50	78	0.5	TiO <sub>2</sub>	2.31%
	Sample 2	0	13	50	78	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.15%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F120	+0.180	+0.125	+0.106	+0.090	-0.063	AL <sub>2</sub> O <sub>3</sub>	95.01%
	Standard	0%	0-20%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.40%
	Sample 1	0	4	50	87	0.5	TiO <sub>2</sub>	2.37%
	Sample 2	0	4	50	87	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.15%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F150	+0.150	+0.106	+0.075	+0.063	-0.045	AL <sub>2</sub> O <sub>3</sub>	94.28%
	Standard	0%	0-15%	40-100%	65-100%	0-3%	SiO <sub>2</sub>	1.42%
	Sample 1	0	4	70	83	0.5	TiO <sub>2</sub>	2.39%
	Sample 2	0	4	70	83	0.5	Fe <sub>2</sub> O <sub>3</sub>	0.16%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F180	+0.125	+0.090	+0.063	+0.053		AL <sub>2</sub> O <sub>3</sub>	95.04%
	Standard	0%	0-15%	40-100%	65-100%		SiO <sub>2</sub>	1.39%
	Sample 1	0	7	50	76		TiO <sub>2</sub>	2.39%
	Sample 2	0	7	50	76		Fe <sub>2</sub> O <sub>3</sub>	0.16%
Physical Analysis	Grit#	Coarsest	Coarse	Normal	Mixed	Fine	Chemical Analysis	
	F220	+0.106	+0.075	+0.053	+0.045		AL <sub>2</sub> O <sub>3</sub>	94.81 %
	Standard	0%	0-15%	40-100%	60-100%		SiO <sub>2</sub>	1.39%
	Sample 1	0	6	50	78		TiO <sub>2</sub>	2.45%
	Sample 2	0	6	50	78		Fe <sub>2</sub> O <sub>3</sub>	0.16%

**Tilting Furnace Material also Available**

## Shape Compare(Roller & Barmac Milled)

