



## WHITE FUSED ALUMINA |

### INTRODUCTION

It is a high-grade refractory raw material made of high-quality industrial aluminum oxide powder after melting at a high temperature above 2200°C in an electric arc furnace and cooling. It is also widely used in the abrasive industry.

The main crystalline phase of this product is  $\alpha$ -Al<sub>2</sub>O<sub>3</sub>, with white in color. The white corundum produced by dumping electric arc furnace has the advantages of large bulk density and low porosity, so as to improve the volume stability and thermal shock resistance of the material.

### APPLICATION - ABRASIVE MATERIALS

The product can be used for the production of consolidation and coating abrasives, such as floor abrasive resistant sand, ceramic roller, wet or dry jet sand. At the same time, it is also suitable for ultra precision grinding and polishing of some products in crystal and electronic industries.

In addition, the product can also be used to process materials with high hardness and tensile strength, such as quenched steel, alloy steel, high speed steel, high carbon steel, etc. It can also be used as contact media, insulators and precision casting sand.

### CHEMICAL COMPOSITION

White Fused Alumina Abrasive F Sand, Fine Powder					
Chemical Composition	Na <sub>2</sub> O ≤	Al <sub>2</sub> O <sub>3</sub> ≥	SiO <sub>2</sub> ≤	Fe <sub>2</sub> O <sub>3</sub> ≤	Magnetic Object ≤
Common	0.3	99.4	0.1	0.05	0.001
Micro Sodium	0.06	99.7	0.1	0.03	0.001



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**F12 ~ F220 COARSE ABRASIVE PARTICLE SIZE COMPOSITION**

Grain Size Marking	Ultra Coarse Grains	Coarse Grains		Medium Grains		Mixed Grains		Fine Grains
	100% Passing The Sieve Number	Failed Sieve Number	Weight ≤%	Failed Sieve Number	Weight ≥ %	Failed Sieve Number	Weight ≥ %	Weight Of Passing Sieve ≤ 3%
<b>F12</b>	7	10	18	12	48	12 14	70	16
<b>F14</b>	8	12	18	14	48	14 16	70	18
<b>F16</b>	10	14	18	16	48	16 18	72	20
<b>F20</b>	12	16	18	18	48	18 20	72	25
<b>F22</b>	14	18	18	20	48	20 25	72	30
<b>F24</b>	16	20	22	25	48	25 30	68	35
<b>F30</b>	18	25	22	30	48	30 35	68	40
<b>F36</b>	20	30	22	35	48	35 40	68	45
<b>F40</b>	25	35	28	40	43	40 45	68	50
<b>F46</b>	30	40	28	45	43	45 50	68	60
<b>F54</b>	35	45	28	50	43	50 60	68	70
<b>F60</b>	40	50	28	60	43	60 70	68	80
<b>F70</b>	45	60	23	70	42	70 80	66	100
<b>F80</b>	50	70	23	80	42	80 100	66	120
<b>F90</b>	60	80	18	100	42	100 120	66	140
<b>F100</b>	70	100	18	120	42	120 140	66	200
<b>F120</b>	80	120	18	140	42	140 170	66	230
<b>F150</b>	100	140	13	170 200	45	170 200 230	70	270
<b>F180</b>	120	170	13	200 230	45	200 230 270	70	270 ≤ 10%
<b>F220</b>	140	200	13	230 270	45	230 270 325	70	325 ≤ 10%



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### | F12 ~ F220 COARSE ABRASIVE PHYSICAL INDEX PARAMETERS

Grain Size Marking	Bulk Density g/cm <sup>3</sup>	Magnetic Substance Content %	Cleanliness ≥	Whiteness %
F12		0.0004	98.5	56.4
F14		0.0001	98.5	51.5
F16		0.0001	98.5	60.4
F20	1.78 - 1.85	0.0003	98.2	61.3
F22		0.0003	97.9	69.9
F24	1.78 - 1.85	0.0004	97.4	70.1
F30	1.77 - 1.82	0.0003	97	71.5
F36	1.74 - 1.81	0.0004	96.4	74.8
F40	1.73 - 1.80	0.0005	95.8	76.8
F46	1.71 - 1.83	0.0005	94.9	77.4
F54	1.68 - 1.78	0.0004	94	78.9
F60	1.67 - 1.77	0.0003	92.9	78
F70	1.59 - 1.72	0.0003	91	77.5
F80	1.57 - 1.72	0.0002	89.8	78
F90		0.0001	88	80.4
F100	1.57 - 1.68	0.0001	86.5	81
F120	1.57 - 1.64	0.0002	83.9	81.4
F150	1.53 - 1.64	0.0002	80.8	78.8
F180	1.53 - 1.64	0.0007	77.3	82.8
F220		0.0015	73	82.6



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### | GRAIN SIZE COMPOSITION OF F230 ~ F1200 FINE POWDER (SEDIMENT TUBE PARTICLE SIZE ANALYZER)

Grain Size Marking	Ds <sub>3</sub> max μm	Medium Grain Size Ds <sub>50</sub> Value μm	Ds <sub>95</sub> min μm
<b>F230</b>	77	55.7 ± 3.0	38
<b>F240</b>	68	47.5 ± 2.0	32
<b>F280</b>	60	39.9 ± 1.5	25
<b>F320</b>	52	32.8 ± 1.5	19
<b>F360</b>	46	26.7 ± 1.5	14
<b>F400</b>	39	21.4 ± 1.0	10
<b>F500</b>	34	17.1 ± 1.0	7
<b>F600</b>	30	13.7 ± 1.0	4.6
<b>F800</b>	26	11.0 ± 1.0	3.5
<b>F1000</b>	23	9.1 ± 0.8	2.4
<b>F1200</b>	20	7.6 ± 0.5	2.4 (80%)