



玉发集团
YUFA GROUP

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 α -Al₂O₃, with white in color. The white corundum which 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 - REFRACTORY MATERIALS

Fused white corundum is the main raw material for the production of high-grade amorphous and stereotyped refractories. It is widely used in iron and steel, cement, ceramics, petroleum and other industries. It is an ideal material for the production of large ladle castables, medium and high-grade iron ditch castables, gunning materials, prefabricated parts and other amorphous refractories, corundum bricks, corundum and mullite corundum saggars, corundum porous plug bricks for refining Integral spray gun, composite nozzle, lining material of high temperature industrial furnace and other main raw materials of corundum products.

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.



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| CHEMICAL COMPOSITION

Chemical Composition of Common White Fused Alumina				
Chemical Composition	Grit > 0.1mm	Typical Value	Fine Powder ≤ 0.1mm	Typical Value
Al ₂ O ₃ %≥	99	99.5	99.00	99
SiO ₂ %≤	0.1 (Actual: 0.02-0.03)	0.05	0.15	0.08
Fe ₂ O ₃ %≤	0.1 (Actual: 0.02)	0.06	0.15	0.06
K ₂ O+Na ₂ O %≤	0.4	0.3	0.45	0.35
Apparent Porosity %≤	8	6		
Bulk Density g/cm ³ ≥	3.6	3.62		
True Density g/cm ³ ≥	3.92	3.92	3.92	3.93

Chemical Composition Of Low Sodium, Micro Sodium White Corundum				
Chemical Composition	Low Sodium		Micro Sodium	
	Guarantee Value	Typical Value	Guarantee Value	Typical Value
Na ₂ O % ≤	0.15	0.08	0.08	0.02
Al ₂ O ₃ % ≥	99.4	99.7	99.6	99.8
SiO ₂ % ≤	0.1	0.05	0.1	0.05
Fe ₂ O ₃ % ≤	0.05	0.02	0.05	0.02



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GRANULARITY COMPOSITION STANDARD

Specification	Coarse Grain		Basic Grain	Fine Grain	
	Mesh Size (mm)	Mass Percent of Oversize	Mass Percent	Mesh Size(mm)	Mass Percent of Undersize
25 ~ 15	20	≤ 8	83	115	≤ 9
15 ~ 10	15			110	
8 ~ 5	8			5	
5 ~ 3	5			3	
3 ~ 1	3			1	
1 ~ 0	1			0.075	≤ 10
1 ~ 0.5				0.5	≤ 9
1 ~ 0.3				0.3	
0.5 ~ 0	0.5		67	0.075	≤ 25
0.3 ~ 0	0.3		82	0.045	≤ 10
0.2 ~ 0	0.2		77		≤ 15
0.088 ~ 0	0.09	90			
0.074 ~ 0	0.075				
0.044 ~ 0	0.045				