



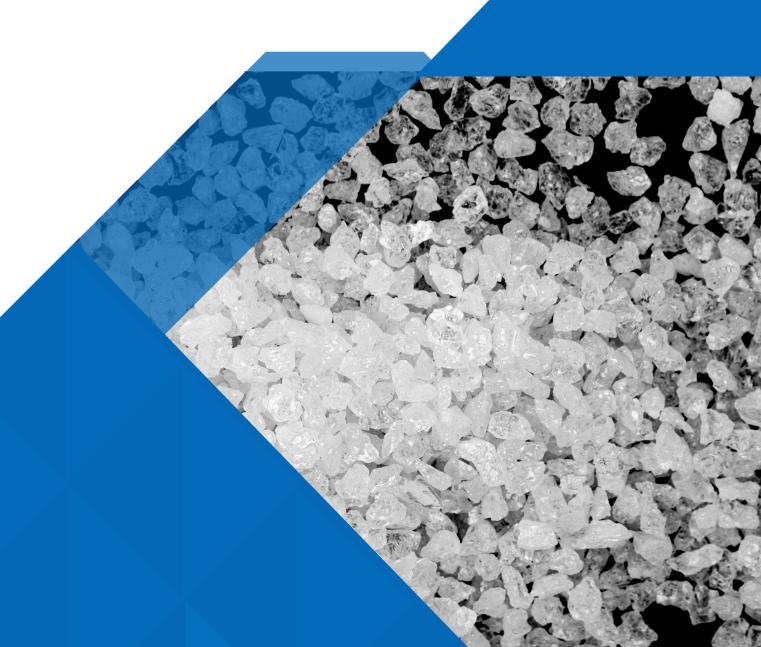
# **XINLI ABRASIVES**

Zhengzhou Xinli New Materials Co., Ltd

20+Years Manufacturer and Supplier Xinli Abrasives is a professional factory that engaged in various abrasive materials production, R&D and sales.



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The company has passed ISO9001:2015 quality management system, ISO14001:2015 environmental management system, ISO45001:2008 occupational health and safety management system certification.

At present, our company has exported to South Korea, Japan, Vietnam, Thailand, the United States, Chile, Mexico etc, and has won unanimous praise from customers.





**FRIENDLY** 

Minimize the impact of yellow and orange weather warning on production.

#### **CUSTOMIZATION**

The particle size distribution within the required normal standard range can be adjusted according to the customer's needs within 10-15 days.

### **QUALITY CONTROL**

With our own smelting
furnace, the quality of raw
materials can be controlled
from the source.



#### **PHYSICAL PROPERTIES**

Appearance: White granular

Crystal Form:  $\alpha$ - Al<sub>2</sub>O<sub>3</sub>

Mohs Hardness: 9.0

Bulk Density: 1.5-2.0g/cm<sup>3</sup>

Specific Gravity: 3.95g/cm<sup>3</sup>

Melting Degree: 2250°C

Refractory Degree: 2000°C

Al<sub>2</sub>O<sub>3</sub> CAS No.: 1344-28-1

HS Code: 2818109000

#### WHITE FUSED ALUMINA GRIT

White fused alumina is obtained by high-purity lowsodium alumina powder after high-temperature melting, cooling, crystallization, and crushing. It is a particle with tightly controlled particle size distribution and consistent appearance.

Performance: White, with more than 99%  $\alpha$ -type crystals, high purity, high hardness, high toughness, strong cutting force, good chemical stability and good insulation.

#### **ADVANTAGES**



Does not affect the color of the workpiece



It can be used for sandblasting in the process where iron powder residue is strictly prohibited

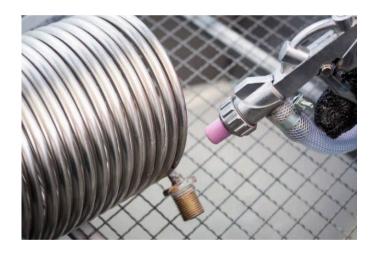


Shaping grade particles are ideal for wet blasting and polishing abrasives



High  $Al_2O_3$  purity with low  $Na_2O$  and low  $SiO_3$ 

Chemical Composition(%)											
Model	Particl	e Size	$Al_2O_3$	Na₂O							
	F4-F80	P12-P80	≥99.20	≤0.30							
WA	F90-F150	P100-P150	≥99.20	≤0.35							
	F180-F220	P180-P220	≥98.70	≤0.40							





- •Sandblasting and polishing operations.
- •Atomized aesthetic processing of glass or acrylic artwork.
- •Sandblasting during TV screen manufacturing.
- •Cutting of silicon wafers.
- •Cleaning and sandblasting of gear .
- •Molding sand for precision casting.
- •Additives for advanced refractories and other ceramics.
- •Advanced grinding and polishing.

ი6



# WHITE FUSED ALUMINA POWDER

#### **PHYSICAL PROPERTIES**

Appearance: White Powder

True Density: 3.90g/cm<sup>3</sup>

Mohs Hardness: 9.0

Melting Point: 2250°C

Al<sub>2</sub>O<sub>3</sub> CAS No.: 1344-28-1

HS Code: 2818109000

- •Sandblasting, polishing and grinding of metal and glass.
- •Filling of the paint, wear-resistant coating, ceramic and glaze.
- •Making oil stone, grinding stone, grinding wheel, sandpaper and emery cloth.
- •Production of ceramic filter membranes, ceramic tubes, ceramic plates.
- •Production of polishing solid wax and liquid wax.
- •For the use of wear-resistant floor.
- •Advanced grinding and polishing of piezoelectric crystals, semiconductors, stainless steel, aluminum and other metals and non-metals.





	Chen	nical Composit	ion(%)									
Model	Particle	e Size	$Al_2O_3$	Na₂O								
	F230-F800 (#240-#1500)	P240-P1500	≥98.50	≤0.50								
WA	F1000-F1200 (#2000-#2500)	P2000-P2500	≥98.30	≤0.60								
	#3000-#8000	_	≥97.60	≤0.80								
	#10000-#20000	_	≥97.40	≤0.90								
Particle Distribution(μm)												
Particle Size	D0	D3	D50	D94								
#240	≤127	≤103	58.6±3.0	≥40.0								
#280	≤112	≤87.0	49.4±3.0	≥33.0								
#320	≤98.0	≤74.0	41.1±2.5	≥27.0								
#360	≤86.0	≥23.0										
#400	≤75.0	≤58.0	30.9±2.0	≥20.0								
#500	≤63.0	≤50.0	26.4±2.0	≥16.0								
#600	≤53.0	≤43.0	21.1±1.5	≥13.0								
#700	≤45.0	≤37.0	17.9±1.3	≥11.0								
#800	≤38.0	≤31.0	14.7±1.0	≥9.00								
#1000	≤32.0	≤27.0	11.9±1.0	≥7.00								
#1200	≤27.0	≤23.0	9.90±0.80	≥5.50								
#1500	≤23.0	≤20.0	8.40±0.60	≥4.50								
#2000	≤19.0	≤17.0	6.90±0.60	≥4.00								
#2500	≤16.0	≤14.0	5.60±0.50	≥3.00								
#3000	≤13.0	≤11.0	4.00±0.50	≥2.00								
#4000	≤11.0	≤8.00	3.00±0.40	≥1.30								
#6000	≤8.00	≤5.00	2.00±0.40	≥0.80								
#8000	≤6.00	≤3.50	1.20±0.30	≥0.60								
#10000	_	_	0.50-0.70	_								
#20000	_	_	0.40-0.50	_								



#### **PHYSICAL PROPERTIES**

Appearance: Brown granular

Crystal: Trigonal crystal

Bulk density: 1.95 g/cm<sup>3</sup>

True density: ≥ 3.9 g/cm<sup>3</sup>

Mohs Hardness: 9.0

Melting point: 2250 ℃

Refractory degree: 1900°C

Molecular formula: Al<sub>2</sub>O<sub>3</sub>

Al<sub>2</sub>O<sub>3</sub> CAS No.: 1344-28-1

HS Code: 2818101000

#### **BROWN FUSED ALUMINA GRIT**

Brown fused alumina takes the high quality bauxite as the raw material, mixing with iron powder and anthracite, produced by melting in the electric arc furnace at a high temperature over 2000°C.

Main chemical compositions are  $Al_2O_3$ ,  $TiO_2$ , and small amount of  $SiO_2$  and  $Fe_2O_3$  etc. Toughness is higher than SiC. It has features of good crystallization, high hardness, low linear expansion coefficient and corrosion resistance.

#### **ADVANTAGES**



High purity, good crystallization, strong fluidity



Small crystal size, impact resistance



Shaping grade particles are ideal for wet blasting and polishing abrasives



Can be processed according to user requirements

#### Chemical Composition(%) $Al_2O_3$ Model Particle Size CaO SiO<sub>2</sub> TiO<sub>2</sub> Fe<sub>2</sub>O<sub>3</sub> F4-F24 P12-P24 ≥95.50 ≤3.40 ≤0.42 ≤1.00 ≤0.25 F30-F80 P30-P80 ≥95.00 ≤1.00 ≤0.25 ≤3.40 ≤0.42 Α F90-F150 P100-P150 ≥94.50 ≤3.40 ≤0.42 ≤1.00 ≤0.25 F180-F220 P180-P220 ≥94.00 ≤1.00 ≤0.25 ≤3.60 ≤0.45





- •F-grit for bonded abrasives such as resin bonded grinding wheels, vitrified grinding wheels.
- •P-grit for coated abrasives such as sandpaper, sanding belts.
- •Blasting media, metal preparation.
- •Laminates, coatings, lapping, polishing.
- •Anti-slip applications like floor, ceramics, auto brake parts.
- •Manufacturing advanced refractory materials, castables, refractory bricks, etc.





#### **APPLICATION**

- •Surface treatment process, sandblasting, grinding, polishing, etc.
- •Manufacture of abrasive tools, such as grinding wheels, abrasive belts, sandpaper, etc.
- •Additives to ceramic materials to improve hardness, wear resistance and impact resistance.
- •Manufacture of components for precision instruments.
- •Preparation of catalysts to improve catalyst activity and stability.
- •Prepare protective materials.
- •Preparation of semiconductor materials.

# BROWN FUSED ALUMINA POWDER

#### **PHYSICAL PROPERTIES**

Appearance: Brown powder

Bulk density: 1.95 g/cm<sup>3</sup>

True density: ≥ 3.9 g/cm<sup>3</sup>

Mohs Hardness: 9.0

Melting point: 2250 ℃

Refractory degree: 1900°C

Al<sub>2</sub>O<sub>3</sub> CAS No.: 1344-28-1

HS Code: 2818101000





	C	hemical Cor	npositi	on(%)								
Model	Particl	e Size	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	SiO <sub>2</sub>	Fe₂O₃					
	F230-F800 #240-#1500	P240-P1500	≥93.50	≤3.80 ≤0.45		≤1.20	≤0.25					
А	F1000-F1200 #2000-#2500	P2000-P2500	≥93.00	≤4.00	≤0.50	≤1.40	≤0.25					
	#3000-#4000	_	≥92.50	≤4.50	≤0.55	≤1.60	≤0.25					
Particle Distribution(µm)												
Particle Size	D0	D3		D	50	D	94					
#240	≤127	≤103		58.6	5±3.0	≥4	0.0					
#280	≤112	≤87.0		49.4	1±3.0	≥3.	3.0					
#320	≤98.0	≤74.0		41.1	±2.5	≥27.0						
#360	≤86.0	≤66.0		36.1	±2.0	≥2.	3.0					
#400	≤75.0	≤58.0		30.9	9±2.0	≥2	0.0					
#500	≤63.0	≤50.0		26.4	1±2.0	≥16.0						
#600	≤53.0	≤43.0		21.1	±1.5	≥13.0						
#700	≤45.0	≤37.0		17.9	9±1.3	≥1	1.0					
#800	≤38.0	≤31.0		14.7	7±1.0	≥9	.00					
#1000	≤32.0	≤27.0		11.9	9±1.0	≥7.	.00					
#1200	≤27.0	≤23.0		9.90	±0.80	≥5	.50					
#1500	≤23.0	≤20.0		8.40	±0.60	≥4	.50					
#2000	≤19.0	≤17.0		6.90	±0.60	≥4.00						
#2500	≤16.0	≤14.0		5.60	±0.50	≥3.00						
#3000	≤13.0	≤11.0		4.00	±0.50	≥2.00						
#4000	≤11.0	≤8.00		3.00	±0.40	≥1.	.30					



#### **GREEN SILICON CARBIDE GRIT**

Green silicon carbide takes petroleum coke and highquality silica as the main raw materials, adding salt as an additive, and is smelted through a resistant furnace at high temperature.

Its hardness is between corundum and diamond, the mechanical strength is higher than corundum, brittle and sharp.

#### **PHYSICAL PROPERTIES**

Appearance: Green granular

Mohs Hardness: 9.2

Basic Mineral: α-SiC

True Density: 3.90 g/cm<sup>3</sup>

Bulk Density: 1.2-1.6g/cm<sup>3</sup>

Crystal: Hexagonal

SiC CAS No.: 409-21-2

HS Code: 2849200000

#### **ADVANTAGES**



High hardness and good wear resistance



Excellent chemical resistance



Has excellent thermal conductivity



Silicon carbide is one of the most widely used and economical one

	Chemical Composition(%)												
Model	Particl	le Size	SiC	F.C.	Fe₂O₃								
	F4-F90	P12-P100	≥99.20	≤0.15	≤0.15								
GC	F100-F150	P120-P150	≥98.80	≤0.20	≤0.20								
	F180-F220	P180-P220	≥98.40	≤0.20	≤0.20								





- •Blasting, surface treatment for glass, ceramic, etc.
- Ceramic products.
- •Raw material of GC grinding wheel, sandpaper, abrasive cloth suitable for marble and granite.
- •Grinding hard alloy ,non-ferrous metal, plastic, etc.
- •Raw material of whetstone, oilstone, grinding stone, abrasive stones and so on.





#### **APPLICATION**

- •Cutting and grinding of solar silicon wafers, semiconductor silicon wafers, and quartz chips.
- •Polishing crystal, solid grain iron.
- •Precision polishing and sandblasting of ceramics and special steel.
- •Consolidated and coated abrasives.
- •Grinding non-metallic materials such as glass, stone, agate and high-end jewelry and jade.
- •Manufacture advanced refractory
  materials, engineering ceramics, heating
  elements and thermal energy elements,
  etc.

# GREEN SILICON CARBIDE POWDER

#### **PHYSICAL PROPERTIES**

Appearance: Green powder

Mohs Hardness: 9.2

Basic Mineral:  $\alpha$ -SiC

True Density: 3.90 g/cm<sup>3</sup>

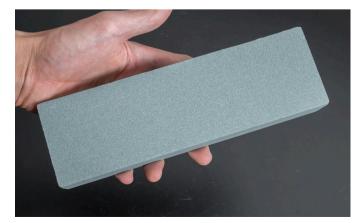
Bulk Density: 1.2-1.6g/cm<sup>3</sup>

Crystal: Hexagonal

SiC CAS No.: 409-21-2

HS Code: 2849200000





		Chemical (	Composition(	%)								
Model	Particle	e Size	SiC	F.C.	Fe <sub>2</sub> O <sub>3</sub>							
	F230-F280 (#240-#360)	P240-P360	≥98.40	≤0.20	≤0.25							
	F320-F500 (#400-#800)	P400-P1000	≥98.20	≤0.20	≤0.30							
GC	F600-F800 (#1000-#1500)	P1200-P1500	≥98.00	≤0.20	≤0.30							
	F1000-F1200 (#2000-#2500)	P2000-P2500	≥ 97.60	≤0.20	≤0.30							
	#3000-#8000	_	≥96.50	≤0.20	≤0.30							
	#10000-#20000	_	≥96.00	≤0.20	≤0.30							
Particle Distribution(µm)												
Pa	article Size	D0	D3	D50	D94							
	#240	≤127	≤103	58.6±3.0	≥40.0							
	#280	≤112	≤87.0	49.4±3.0	≥33.0							
	#320	≤98.0	≤74.0	41.1±2.5	≥27.0							
	#360	≤86.0	≤66.0	36.1±2.0	≥23.0							
	#400	≤75.0	≤58.0	30.9±2.0	≥20.0							
	#500	≤63.0	≤50.0	26.4±2.0	≥16.0							
	#600	≤53.0	≤43.0	21.1±1.5	≥13.0							
	#700	≤45.0	≤37.0	17.9±1.3	≥11.0							
	#800	≤38.0	≤31.0	14.7±1.0	≥9.00							
	#1000	≤32.0	≤27.0	11.9±1.0	≥7.00							
	#1200	≤27.0	≤23.0	9.90±0.80	≥5.50							
	#1500	≤23.0	≤20.0	8.40±0.60	≥4.50							
	#2000	≤19.0	≤17.0	6.90±0.60	≥4.00							
	#2500	≤16.0	≤14.0	5.60±0.50	≥3.00							
	#3000	≤13.0	≤11.0	4.00±0.50	≥2.00							
	#4000	≤11.0	≤8.00	3.00±0.40	≥1.30							
	#6000	≤8.00	≤5.00	2.00±0.40	≥0.80							
	#8000	≤6.00	≤3.50	1.20±0.30	≥0.60							
	#10000	_	_	0.51-0.70	_							
	#20000	_	_	0.50	_							



#### **PHYSICAL PROPERTIES**

Appearance: Black granular

Mohs Hardness: 9.2

Bulk Density: 1.45-1.56g/cm<sup>3</sup>

True Density: 3.12 g/cm<sup>3</sup>

Melting Point: 2250°C

Crystal: Hexagonal

SiC CAS No.: 409-21-2

HS Code: 2849200000

#### **BLACK SILICON CARBIDE GRIT**

Black Silicon Carbide, also known as Black SiC, is primarily composed of silicon and carbon. It is produced through the high-temperature fusion of quartz sand and petroleum coke in an electric resistance furnace.

The powder typically consists of small, sharp-edged particles with a crystalline structure. Black silicon carbide is renowned for its high hardness. This property makes it an excellent abrasive material, which is suitable for applications requiring effective material removal.

#### **ADVANTAGES**



Corrosion resistance, high strength, high hardness



Good wear-resisting performance,resist to shock



It is a cost-effective substitute for ferrosilicon



It has no dust nuisance while feeding the material

#### Chemical Composition(%) Model Particle Size SiC F.C. Fe<sub>2</sub>O<sub>3</sub> F4-F90 P12-P100 ≥98.80 ≤0.15 ≤0.15 F100-F150 P120-P150 ≥98.50 ≤0.20 ≤0.20 F180-F220 P180-P220 ≥98.30 ≤0.25 ≤0.25





- •Production of vitrified grinding wheel and resinoid grinding wheel, other bonded abrasive tools and coated abrasive tools.
- •Casting sand, foundry sand, welding material.
- •Wear proof flooring, abrasion resistant laminate flooring.
- •Sand blasting, polishing and etching on metal and non-metal surfaces.
- •Grinding and polishing of other metal and non-metal parts.





#### **APPLICATION**

- •Ceramic, metal lapping, and polishing applications.
- •SiC Sandpaper, grinding wheels, cut off tools, ceramic disc brakes.
- •Bonded abrasive tool applications.
- •Rock tumbling industries Lapidary use, vibratory machines.
- •Slicing of silicon carbide wafers.
- •Finishing tough and hard materials.
- •Slicing, lapping, and polishing glass and germanium wafers.
- •Lapping of piston rings and gears.
- •Grinding of nonferrous materials.
- •Rock and stone polishing and engraving.
- •Glass etching and glass carving industries.

# BLACK SILICON CARBIDE POWDER

#### **PHYSICAL PROPERTIES**

Appearance: Black powder

Mohs Hardness: 9.2

Bulk Density: 1.45-1.56g/cm<sup>3</sup>

True Density: 3.12 g/cm<sup>3</sup>

Melting Point: 2250°C

Crystal: Hexagonal

SiC CAS No.: 409-21-2

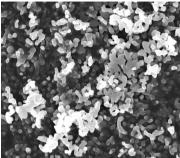
HS Code: 2849200000





		Chemical (	Composition(	%)								
Model	Particl	e Size	SiC	F.C.	Fe <sub>2</sub> O <sub>3</sub>							
	F230-F280 (#240-#360)	P240-P360	≥98.30	≤0.25	≤0.25							
	F320-F500 (#400-#800)	P400-P1000	≥98.10	≤0.25	≤0.30							
С	F600-F800 (#1000-#1500)	P1200-P1500	≥97.80	≤0.25	≤0.30							
	F1000-F1200 (#2000-#2500)	P2000-P2500	≥97.50	≤0.25	≤0.30							
	#3000-#6000	_	≥96.00	≤0.25	≤0.30							
Particle Distribution(µm)												
Pá	article Size	D0	D3	D50	D94							
	#240	≤127	≤103	58.6±3.0	≥40.0							
#280		≤112	≤87.0	49.4±3.0	≥33.0							
#320		≤98.0	≤74.0	41.1±2.5	≥27.0							
	#360	≤86.0	≤66.0	36.1±2.0	≥23.0							
	#400	≤75.0	≤58.0	30.9±2.0	≥20.0							
	#500	≤63.0	≤50.0	26.4±2.0	≥16.0							
	#600	≤53.0	≤43.0	21.1±1.5	≥13.0							
	#700	≤45.0	≤37.0	17.9±1.3	≥11.0							
	#800	≤38.0	≤31.0	14.7±1.0	≥9.00							
	#1000	≤32.0	≤27.0	11.9±1.0	≥7.00							
	#1200	≤27.0	≤23.0	9.90±0.80	≥5.50							
	#1500	≤23.0	≤20.0	8.40±0.60	≥4.50							
	#2000	≤19.0	≤17.0	6.90±0.60	≥4.00							
	#2500	≤16.0	≤14.0	5.60±0.50	≥3.00							
	#3000	≤13.0	≤11.0	4.00±0.50	≥2.00							
	#4000	≤11.0	≤8.00	3.00±0.40	≥1.30							
	#6000	≤8.00	≤5.00	2.00±0.40	≥0.80							

## **ALUMINA POWDER**

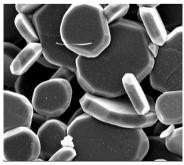




The alumina powder for polishing and grinding produced by our company uses selected industrial-grade alumina powder as raw material, and is condensed and fired through a 90-meter tunnel kiln.

Model			ticle bution	Primary Crystal	α-Al₂O₃ Conversion Rate	Application
	%	D50µm	D100µm	nm	%	
PFA-1-1	≥99.5	1.2-1.9	9	500	>80	5# small white wax
P22-121	≥99.6	1.1-1.5	≤13	150-201	70-85	Titanium alloy mirror medium /fine polishing
PLA-015	≥99.6	1.1-1.5 ≤15		150-200	≥95	Polished sapphire
PA-1-5	≥99.5	1.5-1.7	≤15	300-600	>98	Stainless steel mirror polished
P13-012	≥99.6	1.0-1.2	≤6	250-400	>98	Aluminum alloy mirror polished
XLG-35	≥99.6	2.0-4.0	≤50	≤200	≥88	Paint, acrylic, plastic super
XLG-16H	≥99.6	1.5-2.8	≤15	150-200	≥90	mirror polishing
XLG-12T	≥99.6	1.1-1.5	≤15	150-200	40-50	Copper alloy polishing
XLG-30T	≥99	3.0-4.2	≤10	200-250	>80	Glass polishing
XLG-90	≥99	8-10	≤10	200-250	60-75	Jade polishing

### **PLATELET CALCINED ALUMINA**



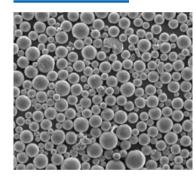


PWA is a high quality alumina type abrasive powder, consisting of a plate-shaped crystal of  $Al_2O_3$  with a purity of over 99.0%. It has excellent heat resistant properties as well as being chemically inert, and is not corroded by either acids or alkalines.

Chemical Composition(%)										
Size	$Al_2O_3$	SiO₂	Fe <sub>2</sub> O <sub>3</sub>	Na₂O						
PWA3-PWA45	> 99.00	< 0.20	< 0.10	< 1.00						

	Pa	rticle Distribution(µ	ım)	
Particle Size	D0	D3	D50	D94
45	< 82.9	53.4±3.2	34.9±2.3	22.8±1.8
40	< 77.8	41.8±2.8	29.7±2.0	19.0±1.0
35	< 64.0	37.6±2.2	25.5±1.7	16.0±1.0
30	< 50.8	30.2±2.1	20.8±1.5	14.5±1.1
25	< 40.3	26.3±1.9	17.4±1.3	10.4±0.8
20	< 32.0	22.5±1.6	14.2±1.1	9.00±0.80
15	< 25.4	16.0±1.2	10.2±0.8	6.30±0.50
12	< 20.2	12.8±1.0	8.20±0.60	4.90±0.40
9	< 16.0	9.70±0.80	6.40±0.50	3.60±0.30
5	< 12.7	7.20±0.60	4.70±0.40	2.80±0.25
3	< 10.1	5.20±0.40	3.10±0.30	1.80±0.30

### **SPHERICAL ALUMINA POWDER**





Spherical Alumina Powder (Conventional Type) is produced by the high-temperature melting-sphere-jet method, and then sieving, purification, and other processes to produce the final object.

Model		XL-1	XL-2	XL-5	XL-10	XL-20	XL-30	XL-40	XL-70	XL-90	XL-120
Particle	D10	0.52	0.68	2.51	4.15	10.4	16.68	23.45	44.22	55.32	90.56
Distribution	D50	1.05	2.08	5.42	10.33	20.70	30.45	41.32	71.45	87.69	122.89
(µm)	D90	2.11	5.14	9.19	18.81	37.24	48.74	66.12	106.23	134.82	172.02
Specific Surface Area	m²/g	1.68	1.28	0.35	0.16	0.12	0.13	0.07	0.05	0.06	0.07
Electric Conductivity	μS/cm	6.07	5.30	5.61	4.06	6.78	7.59	4.56	6.17	8.15	2.6
pH Value	-	7.52	7.79	7.70	7.40	7.61	7.40	7.31	7.40	7.25	7.54
Moisture	%	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
True Density	g/cm³	3.71	3.70	3.73	3.76	3.79	3.79	3.80	3.87	3.88	3.89
Spheroidization Rate	%	97	98	98	98	98	97	96	97	95	96
$Al_2O_3$	%	99.83	99.94	99.93	99.94	99.94	99.93	99.94	99.92	99.94	99.94
SiO <sub>2</sub>	ppm	445	373	423	358	350	352	332	348	331	359
Fe <sub>2</sub> O <sub>3</sub>	ppm	152	120	175	135	145	160	148	157	165	135
Na₂O	ppm	103	106	100	106	105	104	103	103	105	106

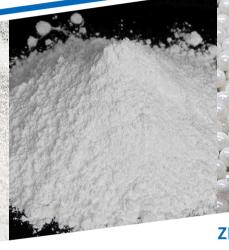
### **ZIRCONIUM OXIDE**

Zirconia oxide, also known as zirconium dioxide ( $ZrO_2$ ), is a versatile material used in various applications due to its unique properties. It is available in different forms such as powder, beads, and sand.



# ZIRCONIUM SILICATE BEAD

Zirconium silicate bead is one of the best choices of media for grinding. It can also be used for dispersion and milling.

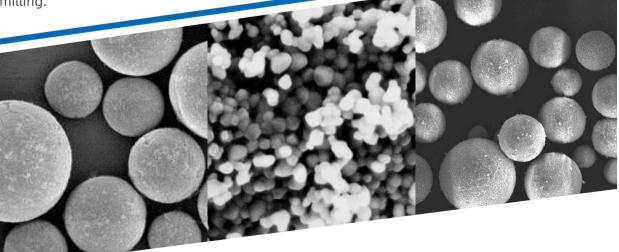


#### **ZIRCONIA POWDER**

Zirconia Powder is a chemically inert material, resistant to high temperature, thermal shock, corrosion, impact, and wear.



Zirconia bead is Yttria Stabilized Zirconia grinding media which finds wide application in high speed vertical & horizontal mills.





### **APPLICATION**

#### **ZIRCONIA POWDER**

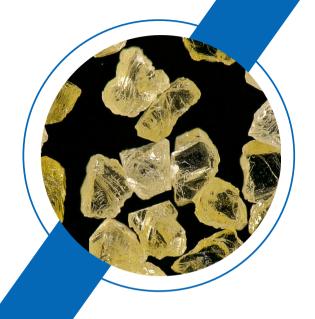
Used in MLCC, piezoelectric ceramics, structural or biological ceramics, functional ceramics refractory material, electronic component, optical communication ceramics, artificial gem, color glaze, watch or jewelry, grinding media, oxygen sensor and solid fuel cell, 3D printing, etc.

#### **ZIRCONIA BEAD**

They are commonly used as grinding media in various milling and dispersion processes. Zirconia beads are used in industries such as pharmaceuticals, cosmetics, and food processing.

#### **ZIRCONIUM SILICATE BEAD**

Zirconium silicate bead is suitable for surface treatment of workpieces with complex metal and plastic structures to improve the fatigue life of the workpiece surface and remove burrs and flash.



#### **DIAMOND POWDER**

Diamond micro powder is a super-hard grinding and polishing material produced by selecting high-quality single crystal artificial diamond as raw material and going through processes such as crushing, shaping, purification, classification, and post-finishing treatment.

It has high hardness, strength, toughness, thermal conductivity and thermal stability, impact resistance, etc.

#### **APPLICATION**

- •As an ultra-precision polishing and grinding material, used for ultra-precision polishing of magnetic heads, hard disks, gemstones, hard glass, ceramics and carbide.
- •Coating of metal molds, tools, components, etc. It can improve wear resistance, surface hardness, and extend service life.
- •Used as an additive to lubricants or engine oils, it can greatly improve the operating performance of industrial machinery and vehicles, reduce failures, and extend service life.
- •Rubber or plastic reinforcement and heat dissipation agent.





		Particle Disti	ribution(µm)		
Particle Size	Size Range	D5	D50	D95	MAX
M0/0.25	0-0.25	0.0	0.125±0.025	0.25	0.75
M0/0.5	0-0.5	0.0	0.25±0.05	0.5	1.50
M0/1	0-1	0.0	0.50±0.10	1.0	3.0
M0.5/1	0.5-1	0.5	0.75±0.15	1.0	3.0
M1/2	1-2	1.0	1.50±0.22	2.0	6.0
M2/4	2-4	2.0	3.0±0.3	4.0	9.0
M3/6	3-6	3.0	4.5±0.45	6.0	12.0
M4/8	4-8	4.0	6.0±0.6	6.0±0.6 8.0	
M5/10	5-10	5.0	7.5±0.75	10.0	18.0
M6/12	6-12	6.0	9.0±0.9	12.0	20.0
M8/16	8-16	8.0	12.0±1.2	16.0	24.0
M10/20	10-20	10.0	15.0±1.5	20.0	26.0
M15/25	15-25	15.0	20.0±2.0	25.0	34.0
M20/30	20-30	20.0	25.0±2.5	30.0	40.0
M25/35	25-35	25.0	30.0±3.0	35.0	48.0
M30/40	30-40	30.0	35.0±3.5	40.0	52.0
M35/55	35-55	35.0	45.0±4.5	55.0	71.0
M40/60	40-60	40.0	50.0±5.0	60.0	78.0
M50/70	50-70	50.0	60.0±6.0	70.0	90.0

# MONOCRYSTALLINE DIAMOND POWDER

Monocrystalline Diamond
Powder is produced from
artificial diamond single
crystal abrasive grains by
static pressure method, which
are crushed and shaped
using a special process for
super-hard materials.

# POLYCRYSTALLINE DIAMOND POWDER

Polycrystalline diamond
powder is micron and submicron polycrystalline particle
composed of diamond grains
with a diameter of 5~10nm
bonded through unsaturated
bonds.

# NANO DIAMOND POWDER

Detonation nano diamonds
(DND) are made of carbon
dissociated from explosives
detonated under high
temperature and pressure.
They are spherical in shape
without sharp edges and
corners.

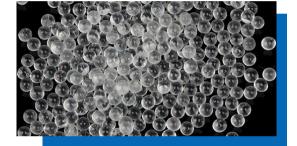
## **OTHER PRODUCTS**



**Walnut Shell** 



Corn Cob



Glass Beads



**Garnet Sand** 



White Cerium Oxide



Red Cerium Oxide



Steel Shot



Steel Grit

## **SANDBLASTING POLISHING-GRAIN SIZE DISTRIBUTION**

ïΞ	Screen Overflow	%	<5	<5>	< <u>&gt;</u> 5	<5	< <u>&gt;</u> 5	<5>	< <u>&gt;</u> 5	<5>	<5	< <u>5</u>	<5	<5>	< <u>&gt;</u> 5	<5	I	I
Fine Grain	Aperture Size	шл	710	009	425	355	300	212	180	150	125	106	06	63	53	45	I	I
	Apertu	ШШ	I	I	Ι	I	I	I	I	I	I	I	I	ſ	I	I	I	1
i	Screen Overflow	%	≥70	>70	09⋜	09⋜	>80	>55	09⋜	09⋜	59⋜	09⋜	09⋜	≥55	>50	09⋜	09≅	>50
Mixed Grain	Aperture Size	шп	I	850	850 710	900 200	500 425	355 300	300 250	250 212	212 180	180 150	150 125	125 106	10 690	907 563	756 353	635 345
2	Apertu	шш	1.18 1.00	1.00	I	I	I	1	I	I	I	I	Ι	I	I	I	1	I
ain	Screen Overflow	%	>35	>35	235	≥45	>50	>30	225	>35	235	230	235	230	>20	230	230	>30
Basic Grain	re Size	щ	1	ı	850	009	200	355	300	250	212	180	150	125	106	9 075	7 563	6 353
	Aperture Size	mm	1.18	1.00	I	I	I	I	I	I	I	I	1	I	ı	I	ı	I
Grain	Screen Overflow	%	≤25	<25	<25	≥30	<15	<30	<35	<35	<25	≥35	<25	<25	<25	<25	≥20	<15
Coarse Gi	re Size	шл	1	I	I	850	710	425	355	300	250	212	180	150	125	106	06	75
O	Aperture Si	шш	1.40	1.18	1.00	1	I	1	I	I	1	I	1	I	1	I	I	I
irain	Screen Overflow	%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coarsest Grain	Aperture Size	шп	I	I	I	Ι	I	710	009	200	425	355	300	250	212	180	180	150
0)	Apertu	шш	2.36	2.00	1.40	1.18	1.00	I	I	I	I	I	I	I	I	I	I	I
	Grain Size		16	20	24	30	36	46	54	09	70	80	06	100	120	150	180	220