

Zirconia Powder Refractory Raw Material Ultrafine Yttria Stabilized Zirconia **Powder**

for more products please visit us on bricksrefractory.com

Place of Origin:	Zhengzhou, Henan, China
• Brand Name:	Rongsheng Xinwei
Certification:	ISO Certification
Model Number:	3YZ-TPZ, 5YZ-TPZ, 8YZ-7 ZTA20, ZTA30
Minimum Order Quantity:	1 Ton
• Price:	200-800 USD
 Packaging Details: 	packed on wooden pallets,

bandages

TT; L/C

20-30DAYS

2000tons /month



• Payment Terms:

Basic Information

• Supply Ability:

Z-TPZ, Ce13, Ce85, packed on wooden pallets, with water-proof cover, and tightened with plastic/steel



Product Specification

Abrasion Resistance:	High
Chemical Resistance:	High
Color:	White
Corrosion Resistance:	High
 Creep Resistance: 	High
 Density: 	High
 Heat Storage Capacity: 	High
 Material: 	Refractory Raw Material
 Melting Point: 	High
 Refractoriness: 	High
• Shape:	Powder
• Size:	Fine
 Slag Resistance: 	High
 Thermal Conductivity: 	Low
Thermal Shock Resistance	e: High

More Images



Product Description

China Factory Wholesale High Quality Zirconia Powder Yttria Stabilized Ultrafine Zirconia Powder

Zirconia has the characteristics of high hardness, high-temperature resistance, chemical corrosion resistance, wear-resistance, small thermal conductivity, strong thermal shock resistance, good chemical stability, outstanding composite material, etc. The properties of the material can be improved by combining nanometer zirconia with alumina and silicon oxide. Nano zirconia is not only used in structural ceramics and functional ceramics. Nano zirconia doped with different elements conductive properties, used in solid battery electrode manufacturing.





Features of High Quality Zirconia Powder:

- Small particle diameter, narrow distribution range, activity, stable.
 Excellent liquidity and compactness, easy to mold and sinter.
- 3. BET and particle size of airflow or granulation one can be controlled on customers's request.

Product Applications of High Quality Zirconia Powder

In recent years, Zirconia Ceramics are increasingly used for biomedical applications . Zirconia is used as a biomaterial. It has advantages over other ceramics because of its high mechanical strength and fracture toughness. Biomaterials have been proposed as artificial bone fillers for repairing bone defects. Zirconia also finds other clinical applications such as: arthroplasty, dental crowns.

Though zirconia and Yttria stabilized Zirconia have orthopedic applications such as hip and knee prostheses, hip joint heads, temporary supports, tibial plates, dental crowns, not much literature reports are available on the studies of this oxide ceramics as drug carriers. etc. Zirconia toughened alumina ceramic foams can be used in potential bone graft applications. Thin films of ZrO2 (Zirconia) have beneficial ceramics properties that offers various possibilities for Technological application such as optical coating, thermal barrier, catalysis or catalytic supports.

Yttria-stabilized zirconia thin films by dip-coating for IT-SOFC application . Solid oxide fuel cell (SOFC) ceria/yttria stabilized zirconia electrolytes for solid oxide fuel cell applications . Zirconia is used as air-fuel ratio sensors for Progress in Synthesis and Applications of Zirconia 26 automotive applications . To combine the mechanical properties of a high strength inert ceramic with the specific properties of bioactive glasses, composite materials based on high-density zirconia substrates coated by bioactive glasses are reported to be used . Zirconia ceramics can be used for functional as well as structural applications.

Parameters of High Quality Zirconia Powder

(1)Yttrium Stabilized Polycrystalline Ultrafine Zirconia Powder

SiO₂%

· · · · · · · · · · · · · · · · · · ·				
Item		Classification		
item	3YZ-TPZ	5YZ-TPZ		8YZ-T
ZrO ₂ wt%	84.3~84.7	90.6~91.0		86~86
Y ₂ O ₃ wt%	5.18~5.22	8.6~9.0		13.3~1
Al ₂ O ₃ ppm	100	0.05~0.45(wt%	b)	0.05~0.45
Fe ₂ O ₃ ppm	50	50		50
SiO ₂ ppm	200	200		200
TiO ₂ ppm	50	50		50
Na ₂ O ppm	50	50		50
K ₂ O ppm	100	100		100
CeO ppm	100	100		100
MgO ppm	100	100		100
Cr ppm	500	500		500
BET m ² /g	5~30	10~32		10~3
Granularity D50 µm		0.5		
PH		6.5		
Apparent Density g/cm ³		1.15~1.25		
(2) Partially Stabilized Zirconia(PSZ)and Z	irconia Toughened Alumina(ZTA)			
ltom	Specificatio		ication	
item	Ce13	Ce85	ZTA20	
ZrO ₂ wt%	86~88	13.5~14.5	18~20	
Y ₂ O ₃ wt%	/	/	1~1.2	
CaO %		0.01		i
MgO %		0.01		
CeO ₂ %	12~14	84.5~85.5	/	
Al ₂ O ₃ %	(0.01		

0.015

Fe ₂ O ₃ %	0.002	
TiO ₂ %	0.005	
Na ₂ O %	0.001	
Cr %	0.02	
D50 µm	0.5~1	
Lgloss %	1.0	

(3) High Purity Ultrafine Zirconia Powder		
Item	Specific	ation
ZrO ₂ wt%	≥99.	7
Y ₂ O ₃ wt%	/	
Al ₂ O ₃ ppm	100)
Fe ₂ O ₃ ppm	50	
SiO ₂ ppm	200)
TiO ₂ ppm	100)
Na ₂ O ppm	50	
K ₂ O ppm	100)
CeO ppm	100)
MgO ppm	100)
Cr ppm	500)
BET m ² /g	5~1	5
Granularity D50 µm	0.5	
PH	6.5	
Apparent Density g/cm ³	0.5~1	.0

Senses are drawn Henan Rongsheng Xinwei New Materials Research Institute Co., Ltd

C +86-18538509097 S Jackyhan2023@outlook.com bricksrefractory.com

11th Floors, Building 6, China Central Electronic Commerce Port, Daxue Road, Zhengzhou, Henan, China