



Product name	Sintered Ceramic Beads, Zirconia Partially Stabilized with Yttria
Product type	YTZP
Features	<ul style="list-style-type: none"> - High purity: made of high grade yttria stabilized zirconia precursors in the nanometer range, which is also chemically co-precipitated by CHEMCO herself. - High density media ideal for high energy mills, maximizing throughput and productivity. - High fracture toughness and high wear resistance minimize the contamination of beads during high speed milling. - 15% superior to Ceria Stabilized Zirconia medias in wear rate through many tests.
Main applications	<p>YTZP beads can be used in milling and dispersion of following materials:</p> <ul style="list-style-type: none"> - Coating, paints, printing and inkjet inks - Pigments and dyes - Pharmaceuticals - Food - Electronic materials and components e.g. CMP slurry, ceramic capacitors, lithium iron phosphate battery - Chemicals including Agrochemicals e.g. fungicides, insecticides - Minerals e.g. TiO₂, GCC and Zircon - Bio-tech (DNA & RNA isolation) - Flow distribution in process technology - Vibro-grinding and polishing of jewelrys, gemstones & aluminum wheels
Technical data*	
Specific density	6.0 ± 0.05 g/cm ³
Bulk density	3.7 kg/l
Hardness	1250 HV
Breaking load	1500 N
Color	White

*typical values

Standard sizes (mm)*		
0.03	0.3 – 0.4	1.4 – 1.7
0.05	0.4 – 0.6	1.5 – 2.0
0.08 – 0.13	0.6 – 0.8	2.0 – 2.5
0.1 – 0.2	0.8 – 1.0	2.6 – 3.3
0.2 – 0.3	1.0 – 1.2	3.5 – 4.5
0.2 – 0.4	1.2 – 1.4	4.5 – 5.5

*other sizes can be customized

Manufacturer/ supplier	<p>Chemco Advance Material (Suzhou) Co., Ltd Manufacturing plant: Guangfu Industrial Park, Fengshan Road, Guangfu Town, Suzhou 215159, CHINA Phone: +86 186 1680 9761 +86 130 6175 4836 Email: info@chemcobeads.com Website: www.chemcobeads.com</p>
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Composition	Weight*	CAS No.
Zirconium dioxide ZrO ₂ + Hafnium dioxide HfO ₂	94.6 %	1314-23-4 12055-23-1
Yttrium oxide Y ₂ O ₃	5.2 %	1314-36-9
Others	0.2 %	
*typical values		
Hazards identification	Health rating: 0 – None Flammability rating: 0 – None Reactivity rating: 0 – None Contact rating: 0 – Slight Possible irritation through abrasive friction. Risk of slipping if the product (beads) is spread out on the floor. As such, the product should not cause an inhalation problem but its utilization can create dust.	
First aid measures	Eyes: may be abrasive through friction, treat as particle in eye.	
Fire fighting measures	This product is not combustible or explosive. It is compatible with all standard fire-fighting methods.	
Accidental release measures	Isolate the area and sweep the floor in order to collect the beads to avoid the slipping by rolling. Wear eye protectors and dust mask.	
Handling and storage	In case of operations, which generate dust, wear dust mask. Wear eye protectors. Heavy material, respect the security rules in case of stocking. Use safety shoes for handling.	
Physical / Chemical Properties	Appearance and odor: odorless white beads Solubility in water: insoluble Volatiles by volume at 21°C: 0% Boiling point: NAIF Melting point: over 1600°C	
Disposal consideration	Whatever cannot be saved for recovery or recycling should be managed in an appropriate waste disposal facility. Dispose of packaging and unused contents in accordance with governmental and local requirements.	
Transport information	Not regulated	
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