



Updated 04/03/2022

Product name	Ceramic Beads, Zirconium Silicate, Sintered
Product type	SZS
Features	<ul style="list-style-type: none"> - Produced from world-class premium zircon (ZrSiO₄) mineral in a special high temperature sintering process - Medium density media particularly suitable for use in large-volume agitated bead mills - Fully dense, perfect sphericity and extremely smooth beads surface - No porous and irregular shape problems - Outstanding breakage resistance - Optimum performance-price ratio - This is the bead recommended to efficiently fine-grind zircon
Main applications	<p>SZS beads can be used in milling and dispersion of following materials, just name a few:</p> <ul style="list-style-type: none"> - Coating, paints, printing and inks - Food (Complying with the regulations of European Food 1935/2004/EC and FDA) - Pigments and dyes - Agrochemicals e.g. fungicides, insecticides - Minerals e.g. TiO₂, GCC, Zircon and Kaolin - Gold, silver, platinum, lead, copper and zinc sulfide
Technical data*	
Specific density	4.0 ± 0.1 g/cm ³
Bulk density	2.4 kg/l
Hardness	1127 (HV1)
Mohs' hardness	7.2
Breaking load	800 N
Color	White (glossy sheen)

*typical values

Standard sizes (∅,mm) *		
0.4 – 0.6	0.6 – 0.8	0.8 – 1.0
1.0 – 1.2	1.2 – 1.4	1.4 – 1.7
1.6 – 1.8	1.8 – 2.0	2.0 – 2.2
2.0 – 2.5	2.5 – 2.8	2.8 – 3.2
3.0 – 4.0	4.0 – 5.0	5.0 – 6.0
6.0 – 7.0	7.0 – 8.0	8.0 – 10.0
10.0 – 12.0	12.0 – 14.0	

*other sizes can be customized

Manufacturer / supplier	<p>Chemco Advance Material (Suzhou) Co., Ltd Guangfu Industrial Park, Fengshan Road, Suzhou, 215159, CHINA Phone: +86 186 1680 9761 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	52 %	1314-23-4 12055-23-1
Silicon oxide SiO ₂	35 %	7631-86-9
Aluminum oxide Al ₂ O ₃	10 %	1344-28-1
Others	< 5 %	

*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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