



Product name	Ceramic Beads (Shots) for Shot Peening
Product type	CZ
Features	<ul style="list-style-type: none"> - Highest Durability- Due to strong mechanical resistance and high toughness - Highest consistency from bead to bead in size distribution, sphericity, density and hardness - No Metallic Contamination and Lowest Dust Generation - Fine Shots efficient for multi peening steps - Lowest Machine Wear- Due to reduced shot throwing velocity needed to achieve the same peening intensities, and the extremely smooth beads' surface - Improved Part Life- Offering high level residual compressive stress close to the surface
Applications	CZ beads can be used in these applications, just name a few: <ul style="list-style-type: none"> - Shot peening to extend fatigue life by stress relieving, peen-forming and peen-straightening - Intensive use in wheel turbine machines and on High Strength Steel (HSS) at the same intensity range as steel shots
Industrial Standards	Conforms to AMES2431/7C-2021, SAE J1830
Technical data	
Specific density	3.6 – 3.95 g/cm ³
Hardness (HV0.5) *	726 (CZ300)
Color	White (glossy sheen)

*typical values

Product code	Size range (Ø,mm)*	Product code	Size range (Ø,mm)*
CZ 100	0.10 – 0.15	CZ 425	0.425 – 0.6
CZ 150	0.15 – 0.21	CZ 600	0.6 – 0.85
CZ 210	0.21 – 0.3	CZ 850	0.85 – 1.18
CZ 300	0.3 – 0.425		

*other sizes can be customized

Manufacturer/ supplier	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
---------------------------	---

Safety Data Sheet **Type CZ**

In compliance with REACH regulation EC No.1907/2006 and US GHS



CHEMCO

Updated 20/04/2024

Identification	REACH registration numbers: Exempted from registration under REACH regulation EC No. 1907/2006			
Composition	Components	Weight*	CAS No.	EC No.
	Zirconium dioxide ZrO ₂	60- 70 %	1314-23-4	215-227-2
	Silicon glass SiO ₂	28- 33 %	60676-86-0	262-373-8
	Aluminum oxide Al ₂ O ₃	< 10%	1344-28-1	215-691-6
	Additional information: The ingredients of the silica-alumina vitreous phase cannot be dissociated by the product application in surface treatment by impact and it is free from crystalline silica. Traces of radioactive elements of natural origin (Series U238 & Th232, U + Th < 0.05 %) *typical values			
Hazards identification	CLP regulation EC 1272/2008: Not classified as a hazardous product OSHA GHS (US): Not classified as a hazardous product Health rating: 0 – None Flammability rating: 0 – None Reactivity rating: 0 – None 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.			
Firefighting 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 Median diameter: < 1.0mm Specific temperatures: over 1600°C Bulk density: 2.3 g/cm ³ Mess density: 3.85 g/ cm ³ Solubility in water: insoluble			
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 restricted			