

Product Data Sheet

First created on: 2015-06-29

Updated on: 2016-07-06

Next inspection on: 2017-06-30

Printed on: 2016-07-06

Product	SiLibeads Ceramic beads Type Z
Material	Ceramic beads made of Zirconium Silicate
Application	SiLibeads Type Z are made of fused Zirconium Silicate.
<u>Colour and Paint Industry:</u>	- grinding and dispersion of coating and paint systems in the middle viscosity range in most of water based systems - grinding and dispersion of pigments to dye textiles and plastics - grinding of inorganic and organic pigments
<u>Plant Protection:</u>	- dispersion of fungicides, herbicides, insecticides
<u>Filler material- and the Coating Industry:</u>	- process of whitener (CaCO_3) for the paper production - grinding of coatings for video and audio tapes
<u>Surface Processing:</u>	- micro beads for shot blasting/shot peening of components made of metal, glass and rubber
Technical Data	
Specific Weight	3.8 kg/l
Bulk density	see table Standard Sizes
Youngs-Module	100 GPa
Microhardness	700 HV ₁₀
Colour	white

Standard Sizes (special diameters by request)

Article	Diameter	Bulk density
94002	0 – 63 μm	---
94003	63 – 125 μm	---
94005	125 – 250 μm	---
94007	250 – 425 μm	---
94008	425 – 600 μm	---
9403	0.20 – 0.40 mm	2.18 kg/l
9405	0.40 – 0.60 mm	2.18 kg/l
9407	0.60 – 0.80 mm	2.19 kg/l
9409	0.80 – 1.00 mm	2.20 kg/l
9411	1.00 – 1.20 mm	2.21 kg/l
9413	1.20 – 1.40 mm	2.22 kg/l
9415	1.40 – 1.60 mm	2.23 kg/l

Chemical Analysis; Beads made of Zirconium Silicate

Name	Method	Weight	CAS-No.	EINECS
		reference value in Weight-%		
Zirconium dioxide $\text{ZrO}_2^{(1)}$ + Hafnium dioxide $\text{HfO}_2^{(1)(2)}$	DIN 51001	67.50 %	1314-23-4 12055-23-1	215-227-2 235-013-2
Silicon dioxide $\text{SiO}_2^{(1)(3)}$	DIN 51001	27.50 %	7631-86-9	231-545-4
others		5.00 %		

⁽¹⁾ Traces of naturally occurring uranium (U) and thorium (Th) are present in concentrations of < 0.05 %.⁽²⁾ natural origin (residue from processing of raw material Zircon sand)⁽³⁾ Silica glass, free from crystalline forms of silica

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Version: V14/2016



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Additional Information	
Storage indication	Store in a dry manner in closed (original) container by room temperature.
Disposal	Please consult national laws and local regulations in force for disposal or landfill.
Safety advice	High risk of slipping due to spillage of product.
Product information	Sample card SiLibeads Ceramic Beads, Safety Data Sheet SiLibeads Type Z; Test Reports
Manufacturer/Supplier	Sigmund Lindner GmbH; Oberwarmensteinacher Straße 38; 95485 Warmensteinach / GERMANY Phone: +49-9277-9940 Fax: +49-9277-99499 Web: www.sili.eu E-Mail: sili@sigmund-lindner.com

All data are reference values – subject to change without prior notice