

Datasheet – Vulcasil Z Zirconia And Zircon Refractories

VULCASIL Z

Vulcasil Z are a range of Zirconia and Zircon based materials, for applications from metal powder manufacture to kiln linings for glost tunnel kilns. The Vulcasil Z range has many specialist applications.

Zirconia is a white crystalline oxide of zirconium. As a refractory, it has unrivalled properties such as resistance to molten metals and slags and the ability to operate at very high temperatures.



Property	Typical			Units	Method
	Vulcasil ZS47	Vulcasil Z96N	Vulcasil Z96S		
Bulk density	3.35	4.3	4.5	g/cm ³	ASTM C20
Apparent porosity	18	24	20	%	ASTM C20
Thermal conductivity at 1200°C		1.3	1.1	W/m/°C	ASTM E1461
Maximum Service Temperature	1450	2200	2200	°C	ASTM E1461
Composition					
Zirconia	49	96	96	Wt.%	XRF
Silica	33	0.5	<0.5		
Other	18	3.5	3.5		

Disclaimer: Any advice, opinion, recommendation or information is given to assist the use of the company's products. **The end user must ensure the suitability of the product for their specific application.** In particular the company cannot accept liability for loss or damage which may arise from the incorrect use of its products or from poor workmanship on the part of the user. Please refer to Vulcan terms and conditions for full terms.





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Vulcasil ZS47

Silicate bonded Zircon with excellent resistance to vapour attack by alkalis and glaze volatiles. Vulcasil ZS47 is the ideal material for glost kiln preheat and early cool zones.



Vulcasil Z96N

A calcium stabilised zirconia, which combines good thermal shock resistance with resistance to erosion by molten alloys. Vulcasil Z is designed for use at extremely high temperatures for applications such as the manufacture of nozzles for the metal powder atomisation and casting industry.

Vulcasil Z96S is ideal for the manufacture of bricks and special shapes for extreme metal melting applications, specifically the nuclear industry where high quality and attention to detail is paramount.



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