

DATA SHEET



Ceramic Core Material

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Description		Physical Properties	
High silica core type with an intermediate particle size distribution and excellent high temperature stability. Used for DS and SX configurations where there are blind passages and core leachability is a concern. Major Chemistry		Modulus of rupture (4-point), psi	1600
		Length shrinkage (mold-to-fired), %	1.3
		Chord shrinkage (mold-to-fired), %	1.2
Silica (SiO ₂), %	93	Thermal expansion coefficient (25 - 1000°C), ppm/°C	1.8
Zircon (ZrSiO ₄), %	3	Bulk density, g/cc	1.6
Alumina (Al ₂ O ₃), %	3	Apparent density, g/cc	2.3
Other, %	1	Porosity, %	31
Trace Element Analysis		Absorption, %	19
Iron (Fe), ppm	< 900	Cristobalite content (after fire), %	9
Bismuth (Bi), ppm	< 1	Cristobalite content	62
Lead (Pb), ppm	< 25	(after 30 min. at 1530°C), %	52
Silver (Ag), ppm	< 25	Leachability (30% boiling KOH, 30 g sample, 15 min.), %	100
Antimony (Sb), ppm	< 25		
Tin (Sn), ppm	< 25	Core – Metal Reaction Compatibility	
Zinc (Zn), ppm	< 50	Most DS and SX alloys.	

Please note that all values quoted are based on test pieces and may vary according to component design. These values are not guaranteed in anyway whatsoever and should only be treated as indicative and for guidance only. Aug.12.2015

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