



Shandong Zhongpeng Special Ceramics Co., Ltd

Weifang city, Shandong province, China

chinesesisic@hotmail.com

Sale director: Caroline

Technical Datasheet	Unit	SiSiC (RBSiC)	NbSiC	ReSiC	Sintered SiC	Al ₂ O ₃
		Reaction Bonded Silicon Carbide	Nitride Bonded Silicon Carbide	Recrystallized Silicon Carbide	Sintered Silicon Carbide	Alumina Ceramic
Bulk density	(g.cm ³)	≥ 3.02	2.75-2.85	2.65~2.75	2.8	3.6-3.85
SiC	(%)	83.66	≥ 75	≥ 99	90	Al ₂ O ₃ ≥92%
Si ₃ N ₄	(%)	0	≥ 23	0	0	0
Si	(%)	15.65	0	0	9	0
Open Porosity	(%)	<0.5	10~12	15-18	7~8	
Bending strength	Mpa / 20°C	250	160~180	80-100	500	200
	Mpa / 1200°C	280	170~180	90-110	550	
Modulus of elasticity	Gpa / 20°C	330	580	300	200	300-350
	Gpa / 1200°C	300	~	~	~	
Thermal conductivity	W/(m*k)	45 (1200°C)	19.6 (1200°C)	36.6 (1200°C)	13.5~14.5 (1000°C)	18 (20°C)
Coefficient of thermal expansion	K ⁻¹ * 10 ⁻⁶	4.5	4.7	4.69	3	8.3
Mons' hardness scale (Rigidity)		9.5 (Vickers 2050)	~	~	~	6-7 (Vickers 1100)
Max-working temperature	°C	1380	1450	1620 (oxid)	1300	1250

1. This information is given in good faith but does not constitute a specification of guarantee.

2. ZPC Ceramics supplies the most competitive and technically-proven range of Reaction-bonded silicon carbide products.