



**HUANGHE MINERALS CO.,LIMITED**

**PRODUCTS SPECIFICATION**

**PRODUCT SIC/SI3N4/B4C**

**VERSION: 2006**

**CODE: T/P/QA**

**ORIGIN: CHINA / NX-HZ-TS**

Code	SIC Green SIC 98G	SIC Black SIC 98B	SIC97B	SIC90B	Si3N4 Si3N4	Si3N4-Fe Si3N4-FE	B4C			
<b>Chemical property</b>										
SIC	99	98.5	97	90-92	Si3N4 80-90	Si3N4 70-80	B4C 96-98			
FE2O3	0.25	0.3	0.5	1.5	Fe2O3 1	Fe 12-17	Fe2O3 0.25-0.45			
FC	0.25	0.3	0.5	3.0		Fe.Si 1	SI 0.2-0.4			
Free SI	0.7	0.7	0.5	0.3		SI 45-50				
Al2O3	0.2	0.2	0.3	0.5		N 27-32	C 17-19			
Magnetic	0.02	0.040	0.08	0.10	SiO2 2.5-4.5		B 77-80			
<b>Physical property</b>										
AP	6-9	6-9	6-9	6-9						
Particle BD		3.20 g/cc	3.20 g/cc	3.10g/cc		PD 0.25g/cc	2.52g/cc			
Appearance	Green	Black	Black	Black	Grey powder	Grey powder	Black			
<b>Mineralogy</b>										
Crystal	Hexagon	Hexagon								
Hardness	9.5 Moh	9.5 Moh	9.5 Moh			Densify 0.5 g/cc	9.5			
True density	3.21 g/cc	3.21g/cc	3.21 g/cc			3.5g/cc	2.52g/cc			
Decomp temp	2600C	2600C					2450 Melting point			
Water absorb	2-4%	2-4%								
<b>Size</b>										
	1.grains like 0-1/1-3/3-5mm, 8x10M, 10x18M,18x35M,35x70M,-18F,-35F ISO, DIN, JIS, ASTM									
	2.Raymond milled powder -200mesh, -300mesh									
	3.Fepa abrasive grade for boned F8-220 and coated P12-220 abrasives									
<b>Pack</b>										
	In 1mt bags / 25kg bags in big bag / 25kg bags on pallets shrink-wrapped									
<b>Application</b>										
	* Green silicon carbide are widely used for coated and boned abrasives with delicate processing.									
	* Black silicon carbide 98,97 can be used both for abrasive application and also refractory application.									
	* Black silica carbide 90 or lower are mainly used for refractory, metallurgical, foundry application.									
	* Si3N4, si3N4-Fe are high hardness, high melting point, stable, low thermal expansion,good anti-oxidizing, anti-metallic erosion materials which are used for tapping hole mix in iron making industry, -200mesh									
	* B4C resist higher temperature, chemical stable, anti-acid, higher hardness, light weight which used for abrasive and refractories industries.									
<b>Description</b>										
	High pure quartz and coal or petro-coke, fused in electric resistance furnaces in 2500C to form large crystal, high density silica carbide. Its high hot resistance, hardness, thermal conduct, lower thermal expan, high thermal shock resistance. Is valuable elements for refractory and ceramics				B4C are made from high pure boric acid and carbon powder in high temperature furnaces. It was widely used for abrasive industry and refractoriness industries. Si3N4 and si3N4-Fe are made from metallic silicon powder or ferr-silicon powder, synthetic in Nitrogen furnaces.					
<b>Price</b>										