

## Poco Graphite SUPERSiC® Si-8C Silicon Carbide

Category : Ceramic , Carbide

### Material Notes:

SUPERSiC that has been infiltrated with silicon and then coated with a 200 µm CVD SiC coating  
 Uses: Ideal for optical and lithography components  
 Information provided by Poco Graphite

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Poco-Graphite-SUPERSiC-Si-8C-Silicon-Carbide.php](http://www.lookpolymers.com/polymer_Poco-Graphite-SUPERSiC-Si-8C-Silicon-Carbide.php)

Physical Properties	Metric	English	Comments
Bulk Density	2.95 g/cc	0.107 lb/in <sup>3</sup>	
Density	3.03 g/cc	0.109 lb/in <sup>3</sup>	
Porosity	0.00 %	0.00 %	porosity sealed off by CVD SiC coating
	4.0 %	4.0 %	porosity is sealed under the dense coating, porosity is not exposed to the process

Mechanical Properties	Metric	English	Comments
Tensile Strength	123.7 MPa	17940 psi	
Modulus of Elasticity	338 GPa	49000 ksi	
Flexural Strength	223.1 MPa	32360 psi	
Poissons Ratio	0.17	0.17	
Fracture Toughness	2.63 MPa-m <sup>1/2</sup>	2.39 ksi-in <sup>1/2</sup>	
Shear Modulus	138 GPa	20000 ksi	Dynamic

Thermal Properties	Metric	English	Comments
CTE, linear	2.40 µm/m-°C	1.33 µin/in-°F	
Thermal Conductivity	220 W/m-K	1530 BTU-in/hr-ft <sup>2</sup> -°F	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00400 ohm-cm	0.00400 ohm-cm	

Descriptive Properties	Value	Comments
Specific stiffness	121 kN.m/g	
Total impurity level		

Descriptive Properties	Value	Comments
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## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China