

## **Specialty Materials SCS-6 Silicon Carbide Monofilament**

Category: Ceramic, Carbide, Other Engineering Material, Composite Fibers

## **Material Notes:**

High strength at high temperature. These fibers are used in metal, ceramic and polymer matrix composites and are extremely effective for high-temperature applications. Silicon carbide reinforced titanium, aluminum and ceramic composites are high in strength and stiffness, lightweight, and maintain their properties at high temperatures. Tests have proven that high fiber strength is maintained up to 1200°C. SiC fibers do not react with typical matrix alloys. Information provided by Specialty Materials, Inc.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Specialty-Materials-SCS-6-Silicon-Carbide-Monofilament.php

Physical Properties	Metric	English	Comments
Density	3.00 g/cc	0.108 lb/in³	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	>= 3450 MPa	>= 500000 psi	
Elongation at Yield	0.90 %	0.90 %	
Modulus of Elasticity	380 GPa	55100 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	4.10 Âμm/m-°C	2.28 µin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Specific Heat Capacity	0.710 J/g-°C	0.170 BTU/lb-°F	
Thermal Conductivity	150 W/m-K	1040 BTU-in/hr-ft²- °F	
Sublimation Temperature	2300 - 2500 °C	4170 - 4530 °F	
Maximum Service Temperature, Air	1400 °C	2550 °F	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0500 ohm-cm	0.0500 ohm-cm	

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842



Mobile: +86 13061808058

Skype: lookpolymers

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