

Specialty Materials Boron Monofilament

Category : Metal , Other Engineering Material , Composite Fibers , Pure Element

Material Notes:

Exceptional compression strength. Specialty Materials' Chemical Vapor Deposition process uses fine tungsten wire for the substrate and boron trichloride gas as the boron source. Information provided by Specialty Materials, Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Specialty-Materials-Boron-Monofilament.php

Physical Properties	Metric	English	Comments
Density	2.57 g/cc	0.0928 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Knoop	3200	3200	
Tensile Strength, Ultimate	3600 MPa	522000 psi	
Elongation at Yield	0.90 %	0.90 %	
Modulus of Elasticity	400 GPa	58000 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	4.50 $\mu\text{m/m}\cdot\text{Å}^\circ\text{C}$	2.50 $\mu\text{in/in}\cdot\text{Å}^\circ\text{F}$	
	@Temperature 20.0 $\text{Å}^\circ\text{C}$	@Temperature 68.0 $\text{Å}^\circ\text{F}$	
Specific Heat Capacity	1.00 J/g $\cdot\text{Å}^\circ\text{C}$	0.239 BTU/lb $\cdot\text{Å}^\circ\text{F}$	
Thermal Conductivity	25.0 W/m-K	174 BTU-in/hr-ft ² $\cdot\text{Å}^\circ\text{F}$	
Melting Point	2300 $\text{Å}^\circ\text{C}$	4170 $\text{Å}^\circ\text{F}$	
Maximum Service Temperature, Air	500 $\text{Å}^\circ\text{C}$	932 $\text{Å}^\circ\text{F}$	

Component Elements Properties	Metric	English	Comments
Boron, B	100 %	100 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	250 ohm-cm	250 ohm-cm	

Processing Properties	Metric	English	Comments
Processing Temperature	1350 $\text{Å}^\circ\text{C}$	2460 $\text{Å}^\circ\text{F}$	

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