

BNZ Materials CS85 High Temperature Structural Insulation

Category : Ceramic , Oxide

Material Notes:

NZ manufactures a variety of non-asbestos calcium silicate structural insulations that combine high strength and excellent thermal insulating characteristics for use in a variety of heat processing, fire protection, and electrical resistance applications. Our Tobermorite crystalline structure provides excellent thermal shock resistance as evidenced in its typical use as a direct contact board for non-ferrous metals and in fire training burn rooms. It is fire resistant to temperatures approaching 2000°F. The Tobermorite crystal is also unique by providing low thermal conductivities that remain relatively constant over a broad range of operating temperatures. Applications: Blow Plates Core Plates Glow Bar Insulators Bottom Boards Dryer Shelves Induction Furnaces Chills Flask Liners Benefits: Economical Corrosion Resistant High Electrical Resistivity Light Weight Insulates up to 1800°F Moisture Resistant Easily Cleaned Strong & Durable Easily Fabricates from Low Warpage Non-Combustible 4' x 8' Sheets Information provided by BNZ Materials Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_BNZ-Materials-CS85-High-Temperature-Structural-Insulation.php

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0492 lb/in ³	

Mechanical Properties	Metric	English	Comments
Modulus of Rupture	0.0207 GPa	3.00 ksi	
Compressive Yield Strength	44.1 MPa @Strain 5.00 %	6400 psi @Strain 5.00 %	
Compressive Strength	71.0 MPa	10300 psi	ultimate load

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.280 W/m-K	1.94 BTU-in/hr-ft ² -°F	
	@Temperature 257 °C	@Temperature 495 °F	
	0.290 W/m-K	2.01 BTU-in/hr-ft ² -°F	
	@Temperature 538 °C	@Temperature 1000 °F	
	0.310 W/m-K	2.15 BTU-in/hr-ft ² -°F	
	@Temperature 204 °C	@Temperature 399 °F	
Shrinkage	0.24 %	0.24 %	Length/width
	@Temperature 871 °C, Time 86400 sec	@Temperature 1600 °F, Time 24.0 hour	
	2.0 %	2.0 %	Thickness
	@Temperature 871 °C,	@Temperature 1600 °F,	

Thermal Properties	Time 86400 sec Metric	Time 24.0 hour English	Comments
--------------------	--------------------------	---------------------------	----------

Electrical Properties	Metric	English	Comments
Volume Resistivity	4.52e+12 ohm-cm	4.52e+12 ohm-cm	ASTM D257
Dielectric Strength	2.40 kV/mm	61.0 kV/in	ASTM D495
Arc Resistance	304 sec	304 sec	ASTM D495

Processing Properties	Metric	English	Comments
Moisture Content	1.0 %	1.0 %	

Descriptive Properties	Value	Comments
Screw Holding Strength	397 kg	at 7/8" penetration

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