

Mykroy/Mycalex MM 400 Machining Grade Glass-bonded Mica Composite

Category : Ceramic , Glass , Glass Ceramic , Machinable Ceramic

Material Notes:

Natural mica filler. Does not burn. Good radiation resistance (3×10^{10} Rads-Cobalt). This ceramoplastic material is a versatile and efficient insulating material designed to meet the exacting demands of technical markets, worldwide. Glass-Bonded Mica is the only inorganic material to bridge the performance materials gap between organic plastics and ceramics. This unique high performance technical ceramic is a union of finely powered electrical quality glass and precisely defined and classified mica. The union of mica and glass takes place under simultaneous pressure and heat, transforming the materials into a new composition that inherits all the insulating advantages of both constituents. These materials are easily machined, mold like plastic, and have a wide range of operating temperatures. They find applications in the aircraft, laser, communications, aerospace, cryogenic, electronic, radiation, semiconductor, computer, automotive, and power distribution industries. Typical data below provided by Mykroy/Mycalex Ceramics.

Order this product through the following link:

http://www.lookpolymers.com/polymer_MykroyMycalex-MM-400-Machining-Grade-Glass-bonded-Mica-Composite.php

Physical Properties	Metric	English	Comments
Density	2.50 g/cc	0.0903 lb/in ³	
Moisture Absorption at Equilibrium	0.00 %	0.00 %	Nil

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell A	46	46	
Hardness, Rockwell H	90	90	
Tensile Strength, Ultimate	41.4 MPa	6000 psi	
Modulus of Elasticity	75.8 GPa	11000 ksi	
Flexural Strength	89.6 MPa	13000 psi	
Compressive Strength	310 MPa	45000 psi	
Izod Impact, Notched	0.961 J/cm	1.80 ft-lb/in	

Thermal Properties	Metric	English	Comments
CTE, linear	11.0 $\mu\text{m}/\text{m}^\circ\text{C}$	6.11 $\mu\text{in}/\text{in}^\circ\text{F}$	
	@Temperature 350 $^\circ\text{C}$	@Temperature 662 $^\circ\text{F}$	
	12.5 $\mu\text{m}/\text{m}^\circ\text{C}$	6.94 $\mu\text{in}/\text{in}^\circ\text{F}$	
	@Temperature 25.0 $^\circ\text{C}$	@Temperature 77.0 $^\circ\text{F}$	
Specific Heat Capacity	0.5021 J/g- $^\circ\text{C}$	0.1200 BTU/lb- $^\circ\text{F}$	

Thermal Properties	0.870 W/m-K Metric	6.04 BTU-in/hr-ft ² -°F English	Comments
Maximum Service Temperature, Air	400 °C	752 °F	Continuous

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+10 ohm-cm	1.00e+10 ohm-cm	
Surface Resistivity per Square	1.00e+9 ohm	1.00e+9 ohm	
Dielectric Constant	6.7	6.7	
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	28.7 kV/mm	730 kV/in	
Dissipation Factor	0.0018	0.0018	
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Loss Index	0.012	0.012	1 MHz
Arc Resistance	245 sec	245 sec	

Descriptive Properties	Value	Comments
Color	Dark Grey	

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