



Mykroy-Mycalex Ceramics

Glass-Mica Composites (Completely Inorganic)

MACHINABLE GRADES TECHNICAL DATASHEET

General Properties	UNIT	MM 400	MM 500	MM 1100
Density	g/cm ³	2.5	2.7	2.8
Moisture Absorption	%	Nil	Nil	Nil
Color	---	D-Gray*	L-Gray*	Cream
Mica Filler	---	Natural	Synthetic	Synthetic
Flammability	---	DOES NOT BURN		

Thermal Properties

Max. Continuous Use Temperature	°F	750	750	1100
	°C	400	400	595
Thermal Conductivity	W/m.K	.87	1.15	1.32
Coefficient of Thermal Expansion (x10⁻⁶)	/°C @ 25°C	12.5	11.57	10.48
	@ 350°C	11.0	10.53	9.74
	@ 500°C	---	---	9.39
Specific Heat	cal/g/°C	0.12	0.12	0.11

Electrical Properties

Dielectric Strength	V/mil	730	530	420
Arc Resistance	Seconds	245	260	345
Dissipation factor	1 MHz	0.0018	0.0013	0.0017
Loss Index	1 MHz	0.012	0.009	0.012
Surface Resistivity	Ω/sq (25°C)	10 ⁹	10 ¹²	10 ¹¹
Volume Resistivity	Ω-cm (25°C)	10 ¹⁰	10 ¹⁴	10 ¹²
Dielectric Constant	1 MHz	6.7	6.9	6.8

Mechanical Properties

Tensile Strength	psi	6000	6000	5000
Flexural Strength	psi	13,000	12,500	11,000
Compressive Strength	psi	45,000	40,000	32,000
Modulus of Elasticity	psi x10 ⁶	11.0	12.0	10.6
Hardness - Rockwell	H	90	90	91
	A	46	46	47
Impact Strength—IZOD (notched)	Ft-lbs/in	1.8	1.7	1.3

Glass Bonded Mica Summary Specification – ASTM D 1039

* : D = Dark; L = Light

“To the best of our knowledge the information contained herein is accurate; however, Crystex Composites LLC does not accept any liability regarding the accuracy or completeness of such information. Further, such information is established using standard base material and thus may change if the product ordered by purchaser requires further processing of base material by us and/or the purchase. Purchaser has the sole responsibility in determining the suitability of any material described herein for the use contemplated and the processing of such material by purchaser.”