



CRYSTEX COMPOSITES LLC

Mykroy/Mycalex Ceramics

125 Clifton Boulevard

Clifton NJ. 07011

Phone: 973-779-8866

Fax: 973-779-2013

www.crystexcomposites.com



MOLDABLE GRADES TECHNICAL DATA SHEET

General Properties	UNIT	MM 451	MM 501	MM 561	MM 601
Density	g/cm ³	2.5	2.6	2.6	2.6
Moisture Absorption	%	Nil	Nil	Nil	Nil
Color	---	D-Green*	Brown	White	Off White
Mica Filler	---	Natural	Synthetic	Synthetic	Synthetic
Flammability		DOES NOT BURN			
Thermal Properties					
Max. Continuous Use Temperature	°F °C	840 450	930 500	1040 560	1100 600
Thermal Conductivity	W/m.K	0.64	1.58	1.46	1.02
Coefficient of Thermal Expansion (x10 ⁻⁶)	°C @ 25°C	10.10	10.60	14.04	9.52
	@ 350°C	11.95	12.44	11.90	10.02
	@ 500°C	---	13.50	10.70	10.40
	@ 600°C	---	---	---	12.60
Electrical Properties					
Dielectric Strength	V/mil kV/mm	530 21.0	480 19.0	425 16.7	580 22.8
Dissipation factor	1 MHz	0.0037	0.010	0.0042	0.0022
Loss Index	1 MHz	0.023	0.070	0.0028	0.014
Surface Resistivity	Ω/sq (25°C)	3.7x10 ¹⁰	5.8 x 10 ¹²	4.0 x 10 ¹⁴	1.4 x 10 ¹³
Volume Resistivity	Ω-cm (25°C)	3.9 x 10 ¹⁴	1.1 x 10 ¹⁵	1.6 x 10 ¹⁴	6.7 x 10 ¹⁵
Dielectric Constant	1 MHz	6.29	6.98	6.87	6.33
Mechanical Properties					
Flexural Strength	psi MPa	12,500 86.2	13,800 95.1	16,000 110	10,500 72.4
Compressive Strength	psi MPa	45,000 310	45,000 310	48,000 331	42,000 289
Flexural Modulus	psi x10 ⁶ GPa	5.1 35.2	6.2 42.7	6.4 44.1	4 27
Hardness - Rockwell	A	47	62	63	46
Impact Strength— IZOD (notched)	Ft-lbs/in J/cm	8 4.27	15 8.01	16 8.54	8 4.27

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."

Updated April 2014