



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

Mica M

Item:	Mica M (Silicone Bonded Mica Paper Laminate)			
Description:	Silicone bonded Muscovite Mica is an alumino-silicate with exceptional physical, electrical, mechanical, and thermal characteristics. Mica M is primarily used in the area of high voltage and high temperature electrical insulation. It has been extremely useful as an asbestos replacement in high temperature applications.			
Availability:	Laminate Sheets:		English Units (in)	SI Units (mm/cm)
		Sheet Size:	98.4 x 41.3	250 x 105 (cm)
		Thickness:	0.010 to 2.5	0.25 to 63.5 (mm)
	Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.		

Key Characteristics	Test Method	Units	Thickness	Typical Values	
Apparent Density	ASTM D-792	lb/in ³ (g/cc)	0.06"	0.080 (2.22)	
Water Absorption	ASTM D-570 D-24/23	%	0.06"	0.65	
Tensile Strength	ASTM D-638 A	ksi (MPa)	0.06"	28.3 (195)	
Flexural Strength	ASTM D-790	ksi (MPa)	0.06"	24.1 (166)	
Compressive Strength	Room Temp.	ASTM D-695A	ksi (MPa)	1"	57.5 (397)
	150°C				44 (304)
	200°C	ASTM D-695 ¹	ksi (MPa)	1"	40.4 (279)
	288°C				43.3 (299)
Flammability Test	UL 94	Class	0.02"	V-O	
Thermal Conductivity	at 23°C	ASTM E-1461	W/m °C	0.25"	0.23
	at 250 °C				0.21
Specic Heat	at 23°C	ASTM E-1269	J/kg °C	0.25"	822
	at 250 °C				1081
Thermal Expansion *along plane	at 110 °C	ASTM E-228	10 ⁻⁶ /°C	0.25"	10
	at 250 °C				28
Dielectric Strength	Room Temp.	ASTM D-149/ in oil	V/mil (kV/mm)	0.04"	629 (24.53)
	1 hr at 400°C T-23°C				631 (24.61)
	1 hr at 600°C T-23°C				593 (23.13)
Heat Resistance	Continuous: 500 °C		Peak : 700 °C		

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.