



MANUFACTURERS OF  
**ELECTRICAL INSULATION MATERIALS**  
 INSULATING COMPONENTS FOR  
**POWER SYSTEMS EQUIPMENT**

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## MATERIAL DATA SHEET

**Item:** Silicone Bonded Mica Paper Laminate

**Description:** Mica is an aluminosilicate with exceptional physical, electrical, mechanical and thermal characteristics with primarily applications being in the area of high voltage and high temperature electrical insulation. It has found extremely successful application as a replacement for asbestos based sheets in the construction and maintenance of electrical induction and arc furnaces, as well as many other high temperature applications.

<b>Availability:</b>	Laminate Sheets:	Thickness:	English units 0.004"–3"	SI Units 0.10mm–76mm
		Sheet Sizes:	40"x48"	101cmx122cm

**Fabricated Parts:** The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers.

Key Characteristics:	Test Method	Units - English (SI)	Typical Values	
			Muscovite	Phlogopite
Density	IEC371-2	lbs/in <sup>3</sup> (g/cc)	.077(2.15)	.077(2.15)
Water Absorption(1/8"thick)	D-570	%	<1	<1
Tensile Strength	ISO527	psi(MPa)	21,755(150)	15,955(110)
Compressive Strength(20 °C)	ISO604	psi(MPa)	58,015(400)	47,862(330)
Compressive Strength(200 °C)	ISO604	psi(MPa)	36,259(250)	34,809(240)
Flame Retardance	UL94		94V-O	94V-O
Arc Resistance	D-495	sec	≥420	≥420
Dielectric Strength				
68 °F(20 °C)	IEC243	V/mil(kV/mm)	625(24.38)	625(24.38)
68 °F(20 °C)after 1hr at 752 °F	IEC243	V/mil(kV/mm)	325(12.68)	325(12.68)
68 °F(20 °C)after 1hr at 1,112 °F	IEC243	V/mil(kV/mm)	250(9.75)	250(9.75)
Track Resistance	IEC112	V	500	525

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