



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

Nomex/Mylar/Nomex

Item:	Nomex/Mylar/Nomex				
Description:	Nomex/Mylar/Nomex is a series of composites consisting of Type 416 Nomex® aramid paper bonded to both sides of mylar polyester film with a high-temperature adhesive system.				
Applications:	Primary ground insulation is rotating electrical apparatus operating at 180°C and above. It is especially well suited for slot cell applications in motors and generators at the integral horsepower range where sheet insulation is normally used. Nomex/Mylar/Nomex may also be used as top sticks and wedges in select applications.				
Benefits:	The outer piles of the aramid paper provide smooth, abrasion-resistant surfaces for ease of insertion in slot cell and wedge applications. The excellent high-temperature capabilities on Nomex protects the polyester film from premature thermal degradation. Type 416 aramid paper exhibits good resistance to puncture and tear propagation, as well as outstanding hot cut-through resistance. The polyester film inner ply provides high dielectric strength for high pot safety, excellent resistance to tear initiation, and a high impact break strength to reduce the likelihood of splitting at slot overhangs. The composite structure blends the benefits of these engineering materials into a tough, flexible electrical insulation material, exhibiting the stiffness and snapback characteristics necessary in motor and generator applications.				
Availability:	Thickness:	Total	Composition (mils)		
			Nomex	Mylar	Nomex
		0.009"	2	5	2
		0.010"	3	3	3
		0.012"	3	5	3
		0.014"	5	3	5
		0.015"	5	5	5
		0.016"	5	5	5
		0.020"	3	14	3
	0.020"	5	10	5	
Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.				

Key Characteristics		0.009" (3-3-3)	0.010" (3-3-3)	0.012" (3-5-3)	0.014" (5-3-5)	0.016" (5-5-5)	0.020" (3-14-3)	0.020" (5-10-5)
Dielectric Breakdown, ASTM D-149 (V)		9,000	10,500	12,000	13,000	15,000	20,000	22,000
Tensile Strength (lbs/in width), ASTM D-828	MD	120	147	170	220	240	290	300
	CMD	90	103	130	158	185	270	280
Graves Tear Strength (lbs)	MD	10	14	16	26	28	37	40
	CMD	9	11	14	16	22	34	32

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.