



THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

| | | | | | |
|---------------|--|--|--------------------|-------|-------|
| 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 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: | <p>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.</p> <p>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</p> | | | | |
| Availability: | Thickness: | Total | Composition (mils) | | |
| | | | Nomex | Mylar | Nomex |
| | | .009" | 2 | 5 | 2 |
| | | .010" | 3 | 3 | 3 |
| | | .012" | 3 | 5 | 3 |
| | | .014 | 5 | 3 | 5 |
| | | .015 | 5 | 5 | 5 |
| | | .016" | 5 | 5 | 5 |
| | .020" | 3 | 14 | 3 | |
| | .020" | 5 | 10 | 5 | |
| | Fabricated Parts: | The Gund Company custom fabricates insulation materials to the exact drawings and specifications of our customers. | | | |

| Key Characteristics | | .009" (3-3-3) | .010" (3-3-3) | .012" (3-5-3) | .014" (5-3-5) | .016" (5-5-5) | .020" (3-14-3) | .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 |