



THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

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|----------------|---|--|------------------------------|
| Item: | PolyPro FR® II, Flame Retardant Polypropylene | | |
| Description: | PolyPro FR® II is a flame retardant polypropylene that carries a UL 94 V-0 flame class rating with features that make it an economical choice for electrical insulation applications. The material is available in a range of standard thicknesses from 0.010" to 0.125". PolyPro FR® II can be fabricated into a wide range of designs using cost effective fabrication methods such as die cutting or knife cutting. It also exhibits excellent formability characteristics allowing it to be scored, shipped flat, and quickly folded into many three dimensional shapes. PolyPro FR® II provides a lower cost alternative for designs incorporating the use of materials such as Formex®, Nomex® 410, and Valox®. UL File Number: E228440 | | |
| Availability*: | Units: | English Units (in) | SI Units |
| | Sheet Size: | 24 x 24 or 48 x 96 | 61cm x 61cm or 122cm x 244cm |
| | Roll Width: | 24 or 48 | 61cm or 122cm |
| | Thickness: | 0.010 to 0.125 | 0.25mm to 3.18mm |
| | Fabricated Parts: | The Gund Company custom fabricates insulation materials to the exact specifications and drawings of our customers. | |

*Standard colors of PolyPro FR®II are black and white. Custom colors, sheet, and roll sizes are available upon request.

| Key Characteristics | Test Method | Units - English (SI) | Typical Values |
|--|-------------|---|------------------------|
| Density | ASTM D-792 | lbs/in ³ (gm/cm ³) | 0.037 (1.035) |
| Oxygen Index | ASTM D-2863 | % | 28 |
| Water Absorption | ASTM D-570 | % | 0.01 |
| Flammability | UL 94 | -- | VTM-0 / V-0 |
| Heat Deflection Temperature (66 psi, 0.125") | ASTM D-648 | °F (°C) | 185 (85) |
| Tensile Strength, Yield ¹ | ASTM D-882 | psi (MPa) | 4,400 (30.3) |
| Tensile Elongation, Yield ¹ | ASTM D-882 | % | >100 |
| Flexural Modulus ¹ | ASTM D-790 | ksi (MPa) | 210 (1,448) |
| Flexural Strength ¹ | ASTM D-790 | psi (MPa) | 5,900 (40.7) |
| IZOD Impact Strength ¹ | ASTM D-256 | ft-lbs/in (J/m) | 1.2 (64) |
| Dielectric Strength ² | ASTM D-149 | Volts/mil | 2,200 |
| Volume Resistivity | ASTM D-257 | ohm-cm | 1.0 x 10 ¹⁶ |
| Dielectric Constant | ASTM D-150 | -- | 2.30 |
| Dielectric Breakdown ² | ASTM D-149 | Volts | 22,000 |
| Dissipation Factor | ASTM D-150 | -- | 0.0009 |
| Comparative Tracking Index | ASTM D-3638 | -- | 600+ |

¹ (23°C, 0.125") ² (0.01")