



PROFESSIONAL PLASTICS

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National Distributor & Manufacturer of High-Performance Plastics

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PP303 / PP303A / PP303B

PP303 is manufactured with meta-aramid textile and high temperature vinyl ester resin. This high temperature resin offers better chemical resistance and improved operating temperatures over Professional Plastics' standard resins.

PP303 A and enhancement B are optional additives that increase the overall strength and reduce friction and wear. Enhancement B is specified when stick-slip or noise may be anticipated.

Benefits:

- Nonconducting
- High load capacity
- Excellent mechanical strength
- Stable in elevated temperatures
- Negligible water swell
- Excellent chemical resistance

Physical Properties		
Compressive Strength (ASTM D695)		
Ultimate	50,000 PSI	345 MPa
Yield	15,000 PSI	103 MPa
Parallel	13,500 PSI	93 MPa
Modulus	500,000 PSI	3,447 MPa
Tensile Strength (ASTM D638)		
	11,000 PSI	75 MPa
Tensile Modulus of Elasticity (ASTM D638)		
	470,000 PSI	3,240 MPa
Poisson's Ratio (ASTM D3039-08)		
		0.231
Shear Strength (ASTM D2344)		
	12,000 PSI	82 MPa
Flexural Modulus of Elasticity (ASTM D790)		
	260,000 PSI	1,793 MPa
Hardness Rockwell M (ASTM D785)		
		100
Density (ASTM D792)		
	0.047 lbs/in ³	1.3 g/cm ³
Water Swell (ASTM D570)		
		<0.15%
Electrical Properties		
Dielectric Strength (ASTM D149-97a)		
		200 volts/mil
Volume Resistivity (ASTM D257-07)		
		4.2 x 10 ¹⁵ ohm-cm
Thermal Properties		
Operating Temperatures		
	-40° to 400° F	-40° to 204° C
Coefficient of Thermal Expansion		
Normal to Laminate	4.0x10 ⁻⁵ /Δ° F	7.2x10 ⁻⁵ /Δ° C
Parallel to Laminate	2.0x10 ⁻⁵ /Δ° F	3.6x10 ⁻⁵ /Δ° C