

TECHNICAL DATA SHEET

GPO-1 (Glass Polymer Laminate)

GPO is constructed with fiberglass-reinforced thermoset polyesters which feature a combination of beneficial electrical and mechanical properties. These attributes include

Dielectric strength, flame resistance, arc and track resistance, high-flex strength and high-impact strength. They maintain stability, will not melt under heat and have excellent overall electrical properties. All grades are UL® recognized.

GPO-1 is a cost-effective, general purpose laminate. It is a solid choice for applications in which good electrical properties, good physical strength and moderate heat resistance are required.

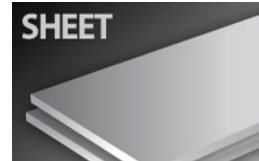
Benefits

- Property retention at elevated levels
- Cost effective
- Good dielectric
- Easily fabricated

Applications

- Transformer spacers
- Operating rods
- Strain insulators
- Tool Handles
- Conduit snakes
- Hand Rails
- Sports equipment
- Strain insulators
- Good dielectric

SHAPE AVAILABLE



TYPICAL PROPERTIES of GPO-1

	UNITS	ASTM	RESULTS
Density	g/cm ³	D792	1.19
MECHANICAL PROPERTIES			
Tensile Strength @ yield	psi	D638	10000
Tensile Modulus	MPa	D638	427000
Tensile Elongation @Break	%	D638	4.5
Flexural Strength	MPa		16000
Flexural Modulus	psi		450000
Compressive Strength	psi	D695	17900
IZOD Impact Strength Notched	kJ.m ²	D256	0.375
THERMAL PROPERTIES			
Coefficient of Linear Thermal Expansion	x10 ⁻⁵ /K	C177	0.000042
Heat Deflection Temp at 264 psi	°F		200
ELECTRICAL PROPERTIES			
Surface Resistivity @60 Hz	ohms/sq	D257	
Volume Resistivity, 50% RH	ohm-cm	D250	
OPTICAL PROPERTIES			
3mm Transparent Clear Transmittance. Total (%)	%	D1003	

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.