

## PEEK 30% Glass Filled Material Specifications

PEEK grades are recognized as having superior balance of chemical and hydrolysis resistance similar to PPS, but can operate at higher temperatures.

Physical Properties	Units	Test	GF30
Density	lb/in <sup>3</sup> g/cm <sup>3</sup>	D792	0.056 1.54
Water Absorption, 24 hrs.	%	D570	0.10
Water Absorption, Saturation	%	D570	-

Mechanical Properties	Units	Test	GF30
Tensile Strength	psi	D638	15,000
Tensile Modulus	psi	D638	900,000
Tensile Elongation at Break	%	D638	3
Flexural Strength	psi	D790	28,000
Flexural Modulus	psi	D790	1,000,000
Compressive Strength	psi	D695	26,000
Compressive Modulus	psi	D695	1,000,000
Hardness Rockwell	-	D785	M103
Izod Impact Notched	ft-lb/in	D256	1.4

Thermal Properties	Units	Test	GF30
Coefficient of Linear Thermal Expansion	X 10 <sup>-5</sup> in./in./°F	D696	1.2
Heat Deflection Temperature	@264 psi °F/°C	D648	600 / 315
Melting Temperature	°F/°C	D3418	644 / 340
Max. Operating Temperature	°F/°C	-	480 / 249
Thermal Conductivity	BTU- in/ft <sup>2</sup> -hr.-°F x 10 <sup>-4</sup> cal/cm-sec-°C	C177	2.98 10.3
Flammability Rating	-	UL94	V - 0

Electrical Properties	Units	Test	GF30
Dielectric Strength	(V/mil) short time, 1/8" thick	D149	500
Dielectric Constant	@1 MHz / @1 KHz	D150	3.70 / -
Dissipation Factor	@1 MHz / @1 KHz	D150	-
Volume Resistivity	Ohm-cm @50% RH	-	5 X 10 <sup>16</sup>

\*\*The information provided in this table is a compilation of publicly available data. This information is provided for comparison purposes only, and is not intended to be warrantable. Further, *Technical Products, Inc.* disclaims any and all liability from errors, in accuracies, or omissions.