

## PEEK CMF 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	CMF
Density	lb/in <sup>3</sup>	D792	0.059
	g/cm <sup>3</sup>		1.64
Water Absorption, 24 hrs.	%	D570	0.04
Water Absorption, Saturation	%	D570	-

Mechanical Properties	Units	Test	CMF
Tensile Strength	psi	D638	15,000
Tensile Modules	psi	D638	798,000
Tensile Elongation at Break	%	D638	4.0
Flexural Strength	psi	D790	-
Flexural Modulus	psi	D790	769,000
Compressive Strength	psi	D695	23,000
Compressive Modulus	psi	D695	565,000
Hardness Rockwell	-	D785	-
Izod Impact Notched	ft-lb/in	D256	-

Thermal Properties	Units	Test	CMF
Coefficient of Linear Thermal Expansion	X 10 <sup>-5</sup> in./in./°F	D696	2.4
Heat Deflection Temperature	@264 psi °F/°C	D648	426 / 219
Melting Temperature	°F/°C	D3418	-
Max. Operating Temperature	°F/°C	-	500 / 260
Thermal Conductivity	BTU- in/ft <sup>2</sup> -hr.-°F	C177	-
	x 10 <sup>-4</sup> cal/cm-sec-°C		-
Flammability Rating	-	UL94	-

Electrical Properties	Units	Test	CMF
Dielectric Strength	(V/mil) short time, 1/8" thick	D149	-
Dielectric Constant	@1 MHz / @1 KHz	D150	-
Dissipation Factor	@1 MHz / @1 KHz	D150	-
Volume Resistivity	Ohm-cm @50% RH	-	> 10 <sup>14</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.