

PEEK EPM-204U-W 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	EPM-204U-W
Density	lb/in ³ g/cm ³	D792	0.055 1.51
Water Absorption, 24 hrs.	%	D570	-
Water Absorption, Saturation	%	D570	0.37

Mechanical Properties	Units	Test	EPM-204U-W
Tensile Strength	psi / MPa	D638	13,000 / 90
Tensile Modulus	Psi / MPa	D638	650,000 / 4480
Tensile Elongation at Break	%	D638	> 10
Flexural Strength	Psi / MPa	D790	23,000 / 159
Flexural Modulus	Psi / MPa	D790	650,000 / 4480
Compressive Strength	Psi / MPa	D695	17,000 / 117
Compressive Modulus	psi	D695	-
Hardness Rockwell	-	D785	M103
Izod Impact Notched	ft-lb/in	D256	1.0

Thermal Properties	Units	Test	EPM-204U-W
Coefficient of Linear Thermal Expansion	X 10 ⁻⁵ in./in./°F X 10 ⁻⁵ mm/mm/°K	D696	2.0 3.6
Heat Deflection Temperature	@66 psi °F/°C @455 KPa °F/°C	D698	>500 >260
Melting Temperature	°F/°C	D3418	645 / 341
Tg Glass Transition Temperature	°F/°C	D3418	290 / 143
Thermal Conductivity	BTU- in/ft ² -hr-°F W/m-°C	C177	2.0 .43
Flammability Rating	-	UL94	-

Electrical Properties	Units	Test	EPM-204U-W
Dielectric Strength	(V/mil) short time, 1/8" thick	D149	400
Dielectric Constant	@1 KHz	D150	3.5
Dissipation Factor	@1 KHz	D150	<0.005
Surface Resistivity	Ohm-cm	D257	>10 ¹³
Volume Resistivity	Ohm-cm	D257	10 ¹⁵

**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.