



Typical Properties of

Carbon Filled PTFE

Polytetrafluoroethylene (PTFE) with 25% Carbon Fiber Filler

Process: Compression Molded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	2.04
Tensile Strength	D638	psi	2,100
Tensile Modulus	D638	psi	N / A
Elongation	D638	%	75
Flexural Strength	D790	psi	2,300
Flexural Modulus	D790	psi	160,000
Compressive Strength	D695	psi	2,650
Compressive Modulus	D695	psi	93,000
Hardness, Rockwell	D785	--	N / A
Hardness Durometer	--	--	D63
Izod Impact (notched)	D256	ft. lb of notch	N / A
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.11
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	5.8×10^{-5}
Continuous Use Temperature	--	°F	500
Heat Deflection Temperature	D648	°F	N / A
Glass Transition Temperature	D3418	°F	68-75
Melting Point	D3418	°F	621
Thermal Conductivity	E1530-11	BTU in/hr ft ² °F	4.5
Dielectric Strength	D149	Volts/mil	N / A
Surface Resistivity	EOS/ESD 511.11	ohm/square	N / A
Flammability	UL94	--	N / A
Water Absorption, 24 hrs.	D570	% by weight	N / A
Water Absorption, Saturation	D570	% by weight	N / A
Limiting PV (4:1 Safety Factor)	--	--	3,200
K-Factor	--	--	N / A
FDA Compliance	--	--	No

Note: The data provided is for reference purposes only. Additional testing may be required for design specifications or quality control.
All values at 73 F unless otherwise stated.