



Typical Properties of

Torlon® 4501

Polyamide-imide with Graphite and PTFE Fillers

Process: Compression Molded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.45
Tensile Strength	D638	psi	10,000
Tensile Modulus	D638	psi	440,000
Elongation	D638	%	3
Flexural Strength	D790	psi	20,000
Flexural Modulus	D790	psi	650,000
Compressive Strength	D695	psi	16,000
Compressive Modulus	D695	psi	359,000
Hardness, Rockwell	D785	--	E70 (M106)
Hardness Durometer	--	--	D90
Izod Impact (notched)	D256	ft. lb of notch	0.5
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.2
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	2.0 x 10 ⁻⁵
Continuous Use Temperature	--	°F	500
Heat Deflection Temperature	D648	°F	534
Glass Transition Temperature	D3418	°F	527
Melting Point	D3418	°F	N / A
Thermal Conductivity	E1530-11	BTU in/hr ft ² °F	3.7
Dielectric Strength	D149	Volts/mil	N / A
Surface Resistivity	EOS/ESD 511.11	ohm/square	>10 ¹³
Flammability	UL94	--	V-0
Water Absorption, 24 hrs.	D570	% by weight	0.3
Water Absorption, Saturation	D570	% by weight	1.5
Limiting PV (4:1 Safety Factor)	--	--	22,500
K-Factor	--	--	5
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.