



Typical Properties of

Torlon® 4503

Unfilled Polyamide-imide

Process: Compression Molded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.4
Tensile Strength	D638	psi	18,000
Tensile Modulus	D638	psi	500,000
Elongation	D638	%	5
Flexural Strength	D790	psi	24,000
Flexural Modulus	D790	psi	600,000
Compressive Strength	D695	psi	18,000
Compressive Modulus	D695	psi	350,000
Hardness, Rockwell	D785	--	E80 (M119)
Hardness Durometer	--	--	D90
Izod Impact (notched)	D256	ft. lb of notch	1.5
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.3
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	1.5×10^{-5}
Continuous Use Temperature	--	°F	500
Heat Deflection Temperature	D648	°F	532
Glass Transition Temperature	D3418	°F	527
Melting Point	D3418	°F	N / A
Thermal Conductivity	E1530-11	BTU in/hr ft ² °F	1.8
Dielectric Strength	D149	Volts/mil	600
Surface Resistivity	EOS/ESD 511.11	ohm/square	$>10^{13}$
Flammability	UL94	--	V-0
Water Absorption, 24 hrs.	D570	% by weight	0.35
Water Absorption, Saturation	D570	% by weight	1.7
Limiting PV (4:1 Safety Factor)	--	--	7,500
K-Factor	--	--	$>1,000$
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.