



Typical Properties of

Semitron® MDS 100

Modified PEEK

Process: Compression Molded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.51
Tensile Strength	D638	psi	14,700
Tensile Modulus	D638	psi	1,500,000
Elongation	D638	%	1.5
Flexural Strength	D790	psi	20,500
Flexural Modulus	D790	psi	1,420,000
Compressive Strength	D695	psi	N/A
Compressive Modulus	D695	psi	N/A
Hardness, Rockwell	D785	--	R121
Hardness Durometer	--	--	N/A
Izod Impact (notched)	D256	ft. lb of notch	N/A
Coeff. of Friction (Dynamic)	--	dry v.s steel	N/A
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	1.1×10^{-5}
Continuous Use Temperature	--	°F	480
Heat Deflection Temperature	D648	°F	410
Glass Transition Temperature	D3418	°F	290
Melting Point	D3418	°F	635
Thermal Conductivity	E1530-11	BTU in/hr ft ² °F	N/A
Dielectric Strength	D149	Volts/mil	376
Surface Resistivity	EOS/ESD 511.11	ohm/square	$>10^{13}$
Flammability	UL94	--	N/A
Water Absorption, 24 hrs.	D570	% by weight	0.1
Water Absorption, Saturation	D570	% by weight	0.5
Limiting PV (4:1 Safety Factor)	--	--	N/A
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.