



Typical Properties of

Semitron® ESd 490HR

Electro Static Dissipative Polyetheretherketone

Process: Compression Molded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.5
Tensile Strength	D638	psi	14,000
Tensile Modulus	D638	psi	940,000
Elongation	D638	%	2.3
Flexural Strength	D790	psi	21,000
Flexural Modulus	D790	psi	950,000
Compressive Strength	D695	psi	26,000
Compressive Modulus	D695	psi	600,000
Hardness, Rockwell	D785	--	R123 (M105)
Hardness Durometer	--	--	N / A
Izod Impact (notched)	D256	ft. lb of notch	1
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.2
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	2.8×10^{-5}
Continuous Use Temperature	--	°F	475
Heat Deflection Temperature	D648	°F	500
Glass Transition Temperature	D3418	°F	290
Melting Point	D3418	°F	644
Thermal Conductivity	E1530-11	BTU in/hr ft ² °F	N / A
Dielectric Strength	D149	Volts/mil	N / A
Surface Resistivity	EOS/ESD 511.11	ohm/square	10^{10} - 10^{12}
Flammability	UL94	--	V-0
Water Absorption, 24 hrs.	D570	% by weight	0.18
Water Absorption, Saturation	D570	% by weight	1.65
Limiting PV (4:1 Safety Factor)	--	--	17,000
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.