POLYMER INDUSTRIES

MECHETEC DELRIN 527UV
Typical Properties

Property	Test Method	Units	Delrin 527UV
Mechanical			
Specific Gravity	ASTM D792	---	1.41
Tensile Strength	ASTM D638	psi	10,200
Elongation at Break	ASTM D638	%	15
Tensile Modulus	ASTM D638	psi	420,000
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	550,000
Compression Strength	ASTM D695	psi	---
Izod Notched Impact	ASTM D256	ft.- lb./in	1.2
Rockwell Hardness	ASTM D785	M or R scale	M89
Thermal			
Coef. Of Linear Thermal Expansion	ASTM D696	in./in./°F	6.0×10^{-5}
Max Continuous Temp.	Internal Std.	°F	185
Heat Defl. Temp. @ 264 psi	ASTM D648	°F	190
Melting Point	ASTM D3418	°F	350
Electrical			
Dielectric Strength-Short Term	ASTM-DI49	volts/mil	500
Dielectric Constant @ 60 Hz	ASTM-D150	volts/mil	3.5
Dielectric Constant @ 10^6 Hz	ASTM-D150	volts/mil	3.5
Dissipation Factor @ 60 Hz	ASTM-D150	volts/mil	0.006
Volume Resistivity	ASTM-D257	ohm-cm	10^{15}
Miscellaneous			
Water Absorption/24 hours	ASTM D570	%	0.25
Water Absorption @ Saturation	ASTM D570	%	0.90
Flammability	UL-94	--	HB
Dynamic Coefficient of Friction	Inernal Std.		0.2
Agency Compliance			
FDA	---	---	No
USDA	---	---	No
NSF	---	---	No

Note: Meets requirements for NAVSEA 5959311 rev. C and NAVSEA 803-4384678rev. B and C

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