



POLYMER INDUSTRIES

MECHETEC DELRIN 570 Typical Properties

Property	Test Method	Units	Delrin 527UV
Mechanical			
Specific Gravity	ASTM D792	---	1.56
Tensile Strength	ASTM D638	psi	8,500
Elongation at Break	ASTM D638	%	12
Tensile Modulus	ASTM D638	psi	860,000
Flexural Strength	ASTM D790	psi	10,700
Flexural Modulus	ASTM D790	psi	730,000
Compression Strength	ASTM D695	psi	---
Izod Notched Impact	ASTM D256	ft.- lb./in	0.6
Rockwell Hardness	ASTM D785	M or R scale	---
Thermal			
Coef. Of Linear Thermal Expansion	ASTM D696	in./in./°F	4.0 x 10 ⁻⁵
Max Continuous Temp.	Internal Std.	°F	200
Heat Defl. Temp. @ 264 psi	ASTM D648	°F	291
Melting Point	ASTM D3418	°F	352
Electrical			
Dielectric Strength-Short Term	ASTM-DI49	volts/mil	450
Dielectric Constant @ 60 Hz	ASTM-D150	volts/mil	---
Dielectric Constant @ 10 ⁶ Hz	ASTM-D150	volts/mil	3.8
Dissipation Factor @ 60 Hz	ASTM-D150	volts/mil	0.006
Volume Resistivity	ASTM-D257	ohm-cm	2x10 ¹⁵
Miscellaneous			
Water Absorption/24 hours	ASTM D570	%	0.25
Water Absorption @ Saturation	ASTM D570	%	1.0
Flammability	UL-94	--	HB
Dynamic Coefficient of Friction	Internal Std.		0.2
Agency Compliance			
FDA	---	---	No
USDA	---	---	No
NSF	---	---	No

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

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