



# POLYMER INDUSTRIES

## MECHETEC DELRIN 527UV Typical Properties

Property	Test Method	Units	Delrin 527UV
<b>Mechanical</b>			
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
<b>Thermal</b>			
Coef. Of Linear Thermal Expansion	ASTM D696	in./in./°F	6.0 x 10 <sup>-5</sup>
Max Continuous Temp.	Internal Std.	°F	185
Heat Defl. Temp. @ 264 psi	ASTM D648	°F	190
Melting Point	ASTM D3418	°F	350
<b>Electrical</b>			
Dielectric Strength-Short Term	ASTM-DI49	volts/mil	500
Dielectric Constant @ 60 Hz	ASTM-D150	volts/mil	3.5
Dielectric Constant @ 10 <sup>6</sup> Hz	ASTM-D150	volts/mil	3.5
Dissipation Factor @ 60 Hz	ASTM-D150	volts/mil	0.006
Volume Resistivity	ASTM-D257	ohm-cm	10 <sup>15</sup>
<b>Miscellaneous</b>			
Water Absorption/24 hours	ASTM D570	%	0.25
Water Absorption @ Saturation	ASTM D570	%	0.90
Flammability	UL-94	--	HB
Dynamic Coefficient of Friction	Internal Std.		0.2
<b>Agency Compliance</b>			
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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