



Delrin®

acetal resin

Delrin® 500TL NC010 1.5% Teflon® PTFE Micropowder in Acetal

Delrin® 500TL is a medium viscosity resin containing 1.5% Teflon® PTFE Micropowder. It is designed for applications requiring moderate low wear and friction against steel, itself, or other plastics.

Property	Test Method	Units	Value
Mechanical			
Tensile Strength at Yield 5mm/min (0.2in/min)	ASTM D 638	MPa (kpsi)	67 (9.7)
Elongation at Break 5mm/min (0.2in/min)	ASTM D 638	%	25
Elongation at Yield 5mm/min (0.2in/min)	ASTM D 638	%	12
Tensile Modulus 5mm/min (0.2in/min)	ASTM D 638	MPa (kpsi)	3100 (450)
Poisson's Ratio			0.35
Flexural Modulus	ASTM D 790	MPa (kpsi)	3000 (430)
Flexural Strength	ASTM D 790	MPa (kpsi)	96 (13.9)
Izod Impact	ASTM D 256	J/m (ft lb/in)	59 (1.1)
Unnotched Impact	ASTM D 4812	J/m (ft lb/in)	740 (14)
Thermal			
Heat Deflection Temperature 0.45MPa (66psi), Not Annealed	ASTM D 648	°C (°F)	166 (330)
1.8MPa (264psi), Not Annealed			100 (212)
Melt Flow Rate 1.05kg at 190C	ASTM D 1238	g/10 min	6
Electrical			
Volume Resistivity	ASTM D 257	ohm cm	1 E15
Dielectric Strength, Short Time 2.3mm (90mils)	ASTM D 149	MV/m (V/mil)	15.2 (450)
Dielectric Constant 1E6 Hz	ASTM D 150		3.3
Dissipation Factor 1E6 Hz	ASTM D 150		0.005

Contact DuPont for MSDS, general guides and/or additional information about ventilation, handling, purging, drying, etc.
Mechanical properties measured at 23°C (73°F) unless otherwise stated.

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Property	Test Method	Units	Value
Other			
Specific Gravity	ASTM D 792		1.42
Water Absorption	ASTM D 570	%	
Equilibrium 50%RH			0.11
Immersion 24hr			0.19
Processing			
Melt Temperature Range		°C (°F)	205-225 (400-440)
Mold Temperature Range		°C (°F)	80-100 (175-210)
Processing Moisture Content		%	<0.1

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