



Delrin®

acetal resin

Delrin® 500T NC010

Toughened Acetal

Delrin® 500T is a toughened, medium viscosity grade with impact resistance similar to Delrin® 100. It can be used in parts requiring noise reduction.

Property	Test Method	Units	Value
Mechanical			
Tensile Strength at Yield 50mm/min (2.0in/min)	ASTM D 638	MPa (kpsi)	53 (7.7)
Elongation at Yield 50mm/min (2.0in/min)	ASTM D 638	%	15
Elongation at Break 50mm/min (2.0in/min)	ASTM D 638	%	75
Tensile Modulus 50mm/min (2.0in/min)	ASTM D 638	MPa (kpsi)	2400 (350)
Flexural Modulus	ASTM D 790	MPa (kpsi)	2250 (330)
Flexural Stress	ASTM D 790	MPa (kpsi)	
Strain 5%			69 (10)
Izod Impact	ASTM D 256	J/m (ft lb/in)	128 (2.4)
Unnotched Impact	ASTM D 4812	J/m (ft lb/in)	NB
Thermal			
Heat Deflection Temperature 0.45MPa (66psi), Not Annealed	ASTM D 648	°C (°F)	157 (315)
1.8MPa (264psi), Not Annealed			79 (174)
CLTE, Parallel 23 - 55C (73 - 130F)	ASTM E 831	E-4/C	1.26
CLTE, Normal 23 - 55C (73 - 130F)	ASTM E 831	E-4/C	1.18
Melting Point	ASTM D 3418	°C (°F)	178 (352)
Flow			
Melt Flow Rate 1.05kg at 190C	ASTM D 1238	g/10 min	5.5

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

Delrin® is a DuPont registered trademark.

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Product Information

Delrin® 500T NC010

Property	Test Method	Units	Value
Electrical			
Surface Resistivity	ASTM D 257	ohm	1 E15
Volume Resistivity	ASTM D 257	ohm cm	1 E15
Dielectric Strength, Short Time 3.2mm (0.126in)	ASTM D 149	kV/mm (V/mil)	15.5 (400)
Dielectric Constant 1E6 Hz	ASTM D 150		3.9
Dissipation Factor 1E6 Hz	ASTM D 150		0.016
Flammability			
Rating @ Min. Thickness			HB
Min. Thickness Tested	UL94	mm	0.75
Other			
Specific Gravity	ASTM D 792		1.39
Water Absorption Equilibrium 50%RH	ASTM D 570	%	0.27
Immersion 24h			0.41
Saturation			0.86
Mold Shrinkage Flow, 24h, 3.2mm (0.126in)	ASTM D 955	%	1.3-1.6
Transverse, 24h, 3.2mm (0.126in)			1.3-1.6
Processing			
Melt Temperature Range		°C (°F)	200-210 (392-410)
Mold Temperature Range		°C (°F)	40-60 (105-140)
Processing Moisture Content		%	<0.05

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