



# Delrin®

acetal resin

## Delrin® 900P NC010

### Low Viscosity Acetal

Delrin® 900P is a low viscosity resin, for molding in multicavity molds and thin sections that are difficult to fill. Delrin® 900P has improved processing thermal stability compared to Delrin® 900.

Property	Test Method	Units	Value
<b>Mechanical</b>			
Tensile Strength 5mm/min (0.2in/min)	ASTM D 638	MPa (kpsi)	69 (10)
Tensile Strength at Yield 5mm/min (0.2in/min)	ASTM D 638	MPa (kpsi)	69 (10)
Elongation at Yield 5mm/min (0.2in/min)	ASTM D 638	%	11
Elongation at Break 5mm/min (0.2in/min)	ASTM D 638	%	25
Tensile Modulus 5mm/min (0.2in/min)	ASTM D 638	MPa (kpsi)	3480 (500)
Shear Strength	ASTM D 732	MPa (kpsi)	66 (9.5)
Flexural Modulus	ASTM D 790	MPa (kpsi)	3240 (470)
Flexural Stress Strain 5%	ASTM D 790	MPa (kpsi)	105 (15.2)
Izod Impact	ASTM D 256	J/m (ft lb/in)	69 (1.3)
Unnotched Impact	ASTM D 4812	J/m (ft lb/in)	1630 (31)
<b>Thermal</b>			
Heat Deflection Temperature 0.45MPa (66psi), Not Annealed	ASTM D 648	°C (°F)	163 (325)
1.8MPa (264psi), Not Annealed			105 (221)
CLTE, Parallel 23 - 55°C (73 - 130°F)	ASTM E 831	E-4/C	1.23

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm. Test temperatures are 23°C unless otherwise stated.

Delrin® is a DuPont registered trademark.

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# Product Information

## Delrin® 900P NC010

Property	Test Method	Units	Value
<b>Thermal</b>			
CLTE, Normal 23 - 55°C (73 - 130°F)	ASTM E 831	E-4/C	1.23
Melting Point	ASTM D 3418	°C (°F)	178 (352)
Thermal Conductivity Cycles 10E6	ASTM C 177	W/m K (Btu in/h ft <sup>2</sup> F)	0.33 (2.3)
<b>Flow</b>			
Melt Flow Rate 1.05kg at 190°C	ASTM D 1238	g/10 min	11
<b>Electrical</b>			
Surface Resistivity	ASTM D 257	ohm	5 E14
Volume Resistivity	ASTM D 257	ohm cm	2 E14
Dielectric Strength, Short Time 3.2mm (0.126in)	ASTM D 149	kV/mm (V/mil)	17.3 (440)
Dielectric Constant 1E6 Hz	ASTM D 150		3.6
Dissipation Factor 1E6 Hz	ASTM D 150		0.006
<b>Flammability</b>			
Flammability Classification 0.8mm	UL94		HB
Rating @ Min. Thickness	UL94		HB
Min. Thickness Tested	UL94	mm	0.75
<b>Other</b>			
Specific Gravity	ASTM D 792		1.42
Hardness, Rockwell Scale R	ASTM D 785		120
Coefficient of Friction Steel, dynamic	ASTM D 1894		0.3
Water Absorption Equilibrium 50%RH	ASTM D 570	%	0.28
Immersion 24h			0.43
Saturation			1.4
Mold Shrinkage Flow, 24h, 3.2mm (0.126in)	ASTM D 955	%	1.6-1.9
Transverse, 24h, 3.2mm (0.126in)			1.7-2.0
<b>Processing</b>			
Melt Temperature Range		°C (°F)	210-220 (410-430)
Mold Temperature Range		°C (°F)	80-100 (175-210)
Processing Moisture Content		%	<0.2

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