



# Delrin®

acetal resin

## Delrin® 1700P NC010

### Ultra Low Viscosity Acetal

Delrin® 1700P is an ultra low viscosity resin for molding in multicavity molds, complex shapes, long flow paths, and thin sections that are difficult to fill. Delrin® 1700P has superior processing characteristics.

Property	Test Method	Units	Value
<b>Mechanical</b>			
Tensile Strength at Yield 5mm/min (0.2in/min)	ASTM D 638	MPa (kpsi)	71 (10.3)
Elongation at Yield 5mm/min (0.2in/min)	ASTM D 638	%	8
Elongation at Break 5mm/min (0.2in/min)	ASTM D 638	%	15
Tensile Modulus 5mm/min (0.2in/min)	ASTM D 638	MPa (kpsi)	3560 (515)
Flexural Modulus	ASTM D 790	MPa (kpsi)	3380 (490)
Flexural Stress Strain 5%	ASTM D 790	MPa (kpsi)	110 (16)
Izod Impact	ASTM D 256	J/m (ft lb/in)	59 (1.1)
<b>Thermal</b>			
Heat Deflection Temperature 0.45MPa (66psi), Not Annealed	ASTM D 648	°C (°F)	165 (329)
1.8MPa (264psi), Not Annealed			103 (217)
CLTE, Parallel 23 - 55C (73 - 130F)	ASTM E 831	E-4/C	1.04
CLTE, Normal 23 - 55C (73 - 130F)	ASTM E 831	E-4/C	1.05
Melting Point	ASTM D 3418	°C (°F)	178 (352)
<b>Flow</b>			
Melt Flow Rate 1.05kg at 190C	ASTM D 1238	g/10 min	17

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.

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# Product Information

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Property	Test Method	Units	Value
<b>Electrical</b>			
Surface Resistivity	ASTM D 257	ohm	6 E14
Volume Resistivity	ASTM D 257	ohm cm	1 E14
Dielectric Strength, Short Time 3.2mm (0.126in)	ASTM D 149	kV/mm (V/mil)	17 (430)
Dielectric Constant 1E6 Hz	ASTM D 150		3.7
Dissipation Factor 1E6 Hz	ASTM D 150		0.005
<b>Flammability</b>			
Rating @ Min. Thickness			HB
Min. Thickness Tested		mm (in)	0.75 (0.03)
<b>Other</b>			
Specific Gravity	ASTM D 792		1.42
Water Absorption Equilibrium 50%RH Immersion 24h	ASTM D 570	%	0.28 0.4
Saturation			1.4
Mold Shrinkage Flow, 24h, 3.2mm (0.126in) Transverse, 24h, 3.2mm (0.126in)	ASTM D 955	%	1.4-1.7 1.5-1.8
<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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