DuPont™ Delrin®

acetal resin

PRELIMINARY DATA

Delrin® 100T NC010

Delrin® 100T NC010 is a toughened, high viscosity acetal homopolymer grade with high impact resistance.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		POM-I
Part Marking Code	ISO 11469		>POM-I<
Mechanical			
Yield Stress	ISO 527	MPa (kpsi)	52 (7.5)
Yield Strain	ISO 527	%	25
Strain at Break	ISO 527	%	
50mm/min			>50
Nominal Strain at Break	ISO 527	%	>50
Tensile Modulus	ISO 527	MPa (kpsi)	1900 (276)
Flexural Modulus	ISO 178	MPa (kpsi)	1700 (245)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	
-30°C (-22°F)			13
23°C (73°F)			25
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m^2	
-30°C (-22°F)			NB
23°C (73°F)			NB

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.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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Property	Test Method	Units	Value
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			130 (265)
1.80MPa			72 (160)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			178 (352)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
23 - 55°C (73 - 130°F)			1.2 (0.67)
Rheological			
Melt Mass-Flow Rate	ISO 1133	g/10 min	
190°C, 2.16kg			2.0
Electrical			
Relative Permittivity	IEC 60250		
1E6 Hz			3.1
Dissipation Factor	IEC 60250	E-4	
1E6 Hz			90
CTI	IEC 60112	V	600
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1370 (1.37)
Hardness, Rockwell	ISO 2039/2		
Scale M			59
Scale R			113
Water Absorption	ISO 62, Similar to	%	
Equilibrium 50%RH			0.3
Saturation, immersed			0.9
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.9
Parallel, 2.0mm			2.1

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Property	Test Method	Units	Value
Processing			
Melt Temperature Range		°C (°F)	200-210 (390-410)
Melt Temperature Optimum		°C (°F)	205 (400)
Mold Temperature Range		°C (°F)	40-60 (100-140)
Mold Temperature Optimum		°C (°F)	50 (122)
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	80 (175)
Processing Moisture Content		%	<0.05
Hold Pressure Range		MPa (kpsi)	60-80 (9-12)

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