Delrin®

acetal resin

Delrin® 100 NC010

High Viscosity Acetal

Delrin® 100 is a high viscosity acetal homopolymer for use in easy to fill molds. Delrin® 100 provides maximum toughness in the product line without modification, and optimum mechanical performance.

Property	Test Method	Units	Value
Mechanical			
Yield Stress	ISO 527-1/-2	MPa (kpsi)	71 (10.3)
Yield Strain	ISO 527-1/-2	%	25
Nominal Strain at Break	ISO 527-1/-2	%	45
Strain at Break	ISO 527-1/-2	%	70
Tensile Modulus	ISO 527-1/-2	MPa (kpsi)	3100 (450)
Tensile Creep Modulus	ISO 899	MPa (kpsi)	
1h			2900 (421)
1000h			1600 (232)
Flexural Modulus	ISO 178	MPa (kpsi)	2700 (390)
Notched Izod Impact	ISO 180/1A	kJ/m^2	
-40°C (-40°F)			13
23°C (73°F)			14
Notched Charpy Impact	ISO 179/1eA	kJ/m^2	
-30°C (-22°F)			11
23°C (73°F)			14
Unnotched Charpy Impact	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.

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Property	Test Method	Units	Value
Thermal			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
0.45MPa			165 (329)
1.80MPa			100 (212)
Melting Temperature	ISO 3146C	°C (°F)	178 (352)
Rheological			
Melt Flow Rate	ISO 1133	g/10 min	
190°C, 2.16kg			2.3
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1420 (1.42)
Hardness, Rockwell	ISO 2039/2		M92
Humidity Absorption	ISO 62, Similar to	%	
Equilibrium 50%RH			0.2
Water Absorption	ISO 62, Similar to	%	
Saturation, immersed			0.9
Molding Shrinkage	ISO 294-4	%	
Normal			1.9
Parallel			2.1
Processing			
Melt Temperature Range		°C (°F)	210-220 (410-430)
Mold Temperature Range		°C (°F)	80-100 (175-210)
Processing Moisture Content		%	<0.2
Hold Pressure Range		MPa (kpsi)	90-110 (13-16)

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