



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.

Delrin® is a DuPont registered trademark.

010308/010309

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-51459 or H-50102.

Start with DuPont Engineering Polymers - www.dupont.com/enggpolymer

Product Information

Delrin® 100 NC010

Property	Test Method	Units	Value
Thermal			
Deflection Temperature 0.45MPa	ISO 75-1/-2	°C (°F)	165 (329)
1.80MPa			100 (212)
Melting Temperature	ISO 3146C	°C (°F)	178 (352)
Rheological			
Melt Flow Rate 190°C, 2.16kg	ISO 1133	g/10 min	2.3
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1420 (1.42)
Hardness, Rockwell	ISO 2039/2		M92
Humidity Absorption Equilibrium 50%RH	ISO 62, Similar to	%	0.2
Water Absorption Saturation, immersed	ISO 62, Similar to	%	0.9
Molding Shrinkage Normal	ISO 294-4	%	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)

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.

010308/010309

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-51459 or H-50102.

Start with DuPont Engineering Polymers - www.dupont.com/enggpolymer