

DuPont™ Delrin®

acetal resin

Delrin® 150 NC010

Delrin® 150 NC010 is a high viscosity acetal homopolymer for extrusion processes. It has excellent thermal stability, low die deposit, and enhanced crystallization for low porosity.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		POM
Part Marking Code	ISO 11469		>POM<
Mechanical			
Yield Stress	ISO 527	MPa (kpsi)	72 (10.4)
Yield Strain	ISO 527	%	21
Nominal Strain at Break	ISO 527	%	40
Tensile Modulus	ISO 527	MPa (kpsi)	3100 (450)
Flexural Modulus	ISO 178	MPa (kpsi)	2900 (420)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	
-30°C (-22°F)			9
23°C (73°F)			12
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			166 (331)
1.80MPa			97 (207)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			178 (350)

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			
CLTE, Normal	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.9 (0.5)
23 - 55°C (73 - 130°F)			1.0 (0.56)
55 - 100°C (130 - 212°F)			1.5 (0.83)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			1.0 (0.56)
23 - 55°C (73 - 130°F)			1.1 (0.61)
55 - 100°C (130 - 212°F)			1.4 (0.78)
Rheological			
Melt Mass-Flow Rate	ISO 1133	g/10 min	
190°C, 2.16kg			2.4
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1420 (1.42)
Water Absorption	ISO 62, Similar to	%	
Immersion 24h			0.39
Molding Shrinkage	ISO 294-4	%	
Normal			2
Parallel			1.8
Processing			
Melt Temperature Range		°C (°F)	210-220 (410-430)
Melt Temperature Optimum		°C (°F)	215 (420)
Mold Temperature Range		°C (°F)	80-100 (175-210)
Mold Temperature Optimum		°C (°F)	90 (195)
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	80 (175)
Processing Moisture Content		%	<0.05
Hold Pressure Range		MPa (kpsi)	90-110 (13-16)

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