

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)
			23°C (73°F)
Thermal			
Deflection Temperature 0.45MPa 1.80MPa	ISO 75-1/-2	°C (°F)	166 (331)
			97 (207)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	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, Parallel -40 - 23°C (-40 - 73°F)	ISO 11359-1/-2	E-4/C (E-4/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)
CLTE, Normal -40 - 23°C (-40 - 73°F)	ISO 11359-1/-2	E-4/C (E-4/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)
Rheological			
Melt Mass-Flow Rate 190°C, 2.16kg	ISO 1133	g/10 min	2.4
Flammability			
Flammability Classification 1.5mm	IEC 60695-11-10		HB
3.0mm			HB
Flammability Classification 1.5mm	UL94		HB
3.0mm			HB
Temperature Index			
RTI, Electrical 1.5mm	UL 746B	°C	50
3.0mm			50
RTI, Impact 1.5mm	UL 746B	°C	50
3.0mm			50
RTI, Strength 1.5mm	UL 746B	°C	50
3.0mm			85

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Property	Test Method	Units	Value
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, 2.0mm			2.0
Parallel, 2.0mm			1.8
Processing - Injection Molding			
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)
Hold Pressure Range		MPa (kpsi)	90-110 (13-16)
Processing - Extrusion			
Melt Temperature Range		°C (°F)	195-205 (385-400)
Melt Temperature Optimum		°C (°F)	200 (395)
Processing Moisture Content		%	<0.2
Processing			
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	80 (175)
Processing Moisture Content		%	<0.2

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