

DuPont™ Delrin®

acetal resin

Delrin® 100KM NC000

Delrin® 100KM is a high viscosity acetal homopolymer resin modified with Kevlar® aramid resin. It is designed for applications requiring low wear in abrasive environments.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		POM-RG
Part Marking Code	ISO 11469		>POM-RG<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	65 (9.4)
Strain at Break	ISO 527	%	15
Tensile Modulus	ISO 527	MPa (kpsi)	3200 (465)
Flexural Modulus	ISO 178	MPa (kpsi)	3000 (435)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	-30°C (-22°F)
			23°C (73°F)
			23°C (73°F)
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	-30°C (-22°F)
			23°C (73°F)
			23°C (73°F)

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 0.45MPa	ISO 75-1/-2	°C (°F)	160 (320)
1.80MPa			98 (210)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	178 (352)
CLTE, Normal	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.92 (0.51)
23 - 55°C (73 - 130°F)			1.0 (0.56)
55 - 100°C (130 - 212°F)			1.4 (0.78)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.94 (0.52)
23 - 55°C (73 - 130°F)			1.1 (0.61)
55 - 100°C (130 - 212°F)			1.4 (0.78)
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1410 (1.41)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.5
Parallel, 2.0mm			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		%	<0.2
Hold Pressure Range		MPa (kpsi)	80-100 (12-15)

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