DuPont™ Delrin®

acetal resin

PRELIMINARY DATA

Delrin® 570 NC000

Delrin® 570 NC000 is a medium viscosity acetal homopolymer containing 20% glass fiber filler for injection molding. Delrin® 570 has very high stiffness, low warpage, and good creep resistance.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		POM-GF20
Part Marking Code	ISO 11469		>POM-GF20<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	55 (8.0)
Strain at Break	ISO 527	%	12
Tensile Modulus	ISO 527	MPa (kpsi)	5000 (725)
Flexural Modulus	ISO 178	MPa (kpsi)	4600 (667)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	
-30°C (-22°F)			3
23°C (73°F)			4
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m^2	
-30°C (-22°F)			50
23°C (73°F)			54
Thermal			
Deflection Temperature	ISO 75-1/-2	°C (°F)	
0.45MPa			163 (325)
1.80MPa			124 (255)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			178 (352)

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.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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Property	Test Method	Units	Value
Electrical			
Surface Resistivity	IEC 60093	ohm	>1E15
Volume Resistivity	IEC 60093	ohm m	1E13
Relative Permittivity	IEC 60250		
1E2 Hz			3.9
1E6 Hz			3.9
Dissipation Factor	IEC 60250	E-4	
1E6 Hz			50
Flammability			
Flammability Classification	IEC 60695-11-10		
1.5mm			HB
Flammability Classification	UL94		
1.5mm			HB
Temperature Index			
RTI, Electrical	UL 746B	°C	
1.5mm			105
3.0mm			105
RTI, Impact	UL 746B	°C	
1.5mm			85
3.0mm			85
RTI, Strength	UL 746B	°C	
1.5mm			90
3.0mm			90

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Property	Test Method	Units	Value
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1560 (1.56)
Water Absorption	ISO 62, Similar to	%	
Equilibrium 50%RH			0.1
Saturation, immersed			0.8
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.6
Parallel, 2.0mm			1.2
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)
Hold Pressure Range		MPa (kpsi)	80-100 (12-15)

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