

DuPont™ Delrin®

acetal resin

PRELIMINARY DATA

Delrin® 577 BK000

Delrin® 577 BK000 is a medium viscosity acetal homopolymer containing 20% glass fiber filler, with high stiffness, low warpage and low creep for superior performance at elevated temperature. It contains carbon black for improved weathering.

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)	54 (7.8)
Strain at Break	ISO 527	%	10
Tensile Modulus	ISO 527	MPa (kpsi)	5200 (754)
Flexural Modulus	ISO 178	MPa (kpsi)	4800 (696)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	-30°C (-22°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.

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
Thermal			
Deflection Temperature 0.45MPa	ISO 75-1/-2	°C (°F)	164 (327)
1.80MPa			130 (266)
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)			0.77 (0.43)
23 - 55°C (73 - 130°F)			0.92 (0.51)
55 - 100°C (130 - 212°F)			1.1 (0.61)
CLTE, Parallel	ISO 11359-1/-2	E-4/C (E-4/F)	
-40 - 23°C (-40 - 73°F)			0.56 (0.31)
23 - 55°C (73 - 130°F)			0.56 (0.31)
55 - 100°C (130 - 212°F)			0.45 (0.25)
Flammability			
Flammability Classification	IEC 60695-11-10		
1.5mm			HB
3.0mm			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
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1560 (1.56)

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Property	Test Method	Units	Value
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		%	<0.1
Hold Pressure Range		MPa (kpsi)	80-100 (12-15)

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