DuPont™ Delrin®

acetal resin

Delrin® 500T BK602

Delrin® 500T BK602 is a toughened, medium viscosity acetal homopolymer resin with impact resistance similar to Delrin® 100. It can be used in parts requiring noise reduction.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		POM-I
Part Marking Code	ISO 11469		>POM-I<
Mechanical			
Yield Stress	ISO 527	MPa (kpsi)	54 (7.8)
Yield Strain	ISO 527	%	17
Strain at Break	ISO 527	%	
50mm/min			45
Nominal Strain at Break	ISO 527	%	28
Tensile Modulus	ISO 527	MPa (kpsi)	2200 (319)
Flexural Modulus	ISO 178	MPa (kpsi)	2000 (290)
Flexural Stress	ISO 178	MPa (kpsi)	
@ 3.5% Strain			60 (8.7)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m^2	
-30°C (-22°F)			7
23°C (73°F)			13
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			146 (295)
1.80MPa			76 (169)
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.

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Property	Test Method	Units	Value
Rheological			
Melt Mass-Flow Rate	ISO 1133	g/10 min	
190°C, 2.16kg			12
Flammability			
Flammability Classification	IEC 60695-11-10		
0.75mm			HB
Flammability Classification	UL94		
0.75mm			HB
High Amperage Arc Ignition Resistance	UL 746A	arcs	
0.75mm			200
Hot Wire Ignition	UL 746A	s	
0.75mm			8
1.5mm			11
3.0mm			15
Temperature Index			
RTI, Electrical	UL 746B	°C	
0.75mm			105
RTI, Impact	UL 746B	°C	
0.75mm			85
RTI, Strength	UL 746B	°C	
0.75mm			85
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1390 (1.39)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			1.5
Parallel, 2.0mm			1.5

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Property	Test Method	Units	Value
Processing			
Melt Temperature Range		°C (°F)	200-210 (390-410)
Melt Temperature Optimum		°C (°F)	205 (400)
Mold Temperature Range		°C (°F)	40-60 (100-140)
Mold Temperature Optimum		°C (°F)	50 (122)
Drying Time, Dehumidified Dryer		h	2-4
Drying Temperature		°C (°F)	80 (175)
Processing Moisture Content		%	<0.05
Hold Pressure Range		MPa (kpsi)	60-80 (9-12)

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