

DuPont™ Delrin®

acetal resin

Delrin® 100AF

Delrin® 100AF is a high viscosity acetal homopolymer containing 20% Teflon® PTFE fibers. It is designed for applications requiring low wear and/or low friction against steel, itself, and other surfaces.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		POM-SF20
Part Marking Code	ISO 11469		>POM-SF20<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	53 (7.7)
Strain at Break	ISO 527	%	15 (10)
Tensile Modulus	ISO 527	MPa (kpsi)	2700 (390)
Flexural Modulus	ISO 178	MPa (kpsi)	2500 (360)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	5
Unnotched Charpy Impact Strength	ISO 179/1eU	kJ/m ²	70
Thermal			
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	178 (350)
CLTE, Normal -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)			1.3 (0.69)
CLTE, Parallel -40 - 23°C (-40 - 73°F)	ISO 11359-1/-2	E-4/C (E-4/F)	1.0 (0.57)
23 - 55°C (73 - 130°F)			1.1 (0.62)
55 - 100°C (130 - 212°F)			1.3 (0.70)

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	
Flammability				
Flammability Classification	IEC 60695-11-10			
1.5mm				HB
3.0mm			HB	
Flammability Classification	UL94			
1.5mm				HB
3.0mm				HB
Temperature Index				
RTI, Electrical	UL 746B	°C		
1.5mm				105
3.0mm				105
6.0mm			105	
RTI, Impact	UL 746B	°C		
1.5mm				85
3.0mm				85
6.0mm			85	
RTI, Strength	UL 746B	°C		
1.5mm				90
3.0mm				90
Other				
Density	ISO 1183	kg/m ³ (g/cm ³)	1540 (1.54)	
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)	90-110 (13-16)	

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