

DELTRIN 500CL BK601

Delrin USA, LLC - Acetal (POM) Homopolymer

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Lubricant • Mold Release		
Features	• Homopolymer • Low Friction	• Lubricated • Medium Viscosity	• Wear Resistant
RoHS Compliance	• Contact Manufacturer		
Automotive Specifications	• FORD WSK-M4D637-A5	• GM GMP.POM.013	• STELLANTIS MS-DB-100 CPN2206
Part Marking Code (ISO 11469)	• >POM<		
Resin ID (ISO 1043)	• POM		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	15	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.9	%	
Flow	2.0	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	464000	psi	ISO 527-1
Tensile Stress (Yield)	9860	psi	ISO 527-2
Tensile Strain (Yield)	13	%	ISO 527-2
Nominal Tensile Strain at Break	28	%	ISO 527-2
Flexural Modulus	421000	psi	ISO 178
Poisson's Ratio	0.37		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in ²	
73°F	3.8	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	320	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	194	°F	ISO 75-2/A
Melting Temperature ²	352	°F	ISO 11357-3
RTI Elec			UL 746B
0.030 in	122	°F	
0.06 in	212	°F	
0.12 in	212	°F	
RTI Imp			UL 746B
0.030 in	122	°F	
0.06 in	176	°F	
0.12 in	176	°F	
RTI Str			UL 746B
0.030 in	122	°F	
0.06 in	185	°F	
0.12 in	185	°F	



Annealing Temperature	320 °F	
Annealing Time - Optional	30.0 min/mm	
Electrical	Nominal Value	Unit Test Method
Comparative Tracking Index	600 V	IEC 60112
Flammability	Nominal Value	Unit Test Method
Burning Rate ³ (0.0394 in)	< 3.1 in/min	ISO 3795
Flame Rating		UL 94
0.030 in	HB	
0.06 in	HB	
Flammability Classification		IEC 60695-11-10, -20
0.030 in	HB	
0.06 in	HB	
FMVSS Flammability	B	FMVSS 302

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176 °F	
Drying Time - Desiccant Dryer	2.0 to 4.0 hr	
Suggested Max Moisture	< 0.20 %	
Processing (Melt) Temp	410 to 428 °F	
Melt Temperature, Optimum	419 °F	
Mold Temperature	176 to 212 °F	
Mold Temperature, Optimum	194 °F	
Holding Pressure	11600 to 14500 psi	
Drying Recommended	yes	
Hold Pressure Time	8.00 s/mm	
Maximum Screw Tangential Speed	709 in/min	

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

³ FMVSS 302

