

DELTRIN 500CPE BK602

Delrin USA, LLC - Acetal (POM) Homopolymer

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Mold Release		
Features	• Good Mold Release	• Good Thermal Stability	• Low VOC
	• Good Processability	• Homopolymer	• Medium Viscosity
Uses	• Automotive Applications		
RoHS Compliance	• Contact Manufacturer		
Part Marking Code (ISO 11469)	• >POM<		
Resin ID (ISO 1043)	• POM		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	14	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.7	%	
Flow	1.8	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	479000	psi	ISO 527-1
Tensile Stress (Yield)	10700	psi	ISO 527-2
Tensile Strain (Yield)	15	%	ISO 527-2
Nominal Tensile Strain at Break	25	%	ISO 527-2
Poisson's Ratio	0.37		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.3	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	95	ft·lb/in ²	
73°F	110	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	216	°F	ISO 75-2/A
Melting Temperature ²	352	°F	ISO 11357-3
Annealing Temperature	320	°F	
Annealing Time - Optional	30.0	min/mm	
Flammability	Nominal Value	Unit	Test Method
Burning Rate (0.0394 in)	1.2	in/min	ISO 3795
Flame Rating			UL 94
0.031 in	HB		
0.06 in	HB		
Flammability Classification			IEC 60695-11-10, -20
0.03 in	HB		
0.06 in	HB		
FMVSS Flammability	B		FMVSS 302
Fill Analysis	Nominal Value	Unit	Test Method
Melt Density	1.19	g/cm ³	
Additional Information	Nominal Value	Unit	Test Method



Emission	< 2 ppm	VDA 275
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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	392 to 410	°F
Melt Temperature, Optimum	401	°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

