

DELTRIN 100CPE BK602

Delrin USA, LLC - Acetal (POM) Homopolymer

General Information
General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	<ul style="list-style-type: none"> • Good Moldability • Good Processability • Good Strength • Good Thermal Stability • Good Toughness • High Viscosity • Homopolymer • Low VOC
Uses	• Mold Making
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)	2.5	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	2.1	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.7	%	
Flow	2.1	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	450000	psi	ISO 527-1
Tensile Stress (Yield)	10600	psi	ISO 527-2
Tensile Strain (Yield)	22	%	ISO 527-2
Tensile Strain (Break)	> 50	%	ISO 527-2
Nominal Tensile Strain at Break	40	%	ISO 527-2
Poisson's Ratio	0.37		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.8	ft·lb/in ²	
73°F	5.2	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	140	ft·lb/in ²	
73°F	No Break		
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)	203	°F	ISO 75-2/A
Melting Temperature ²	352	°F	ISO 11357-3
Annealing Temperature	320	°F	
Annealing Time - Optional ³	30.0	min/mm	
Flammability	Nominal Value	Unit	Test Method
Burning Rate (0.0394 in)	0.98	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	
Fill Analysis	Nominal Value	Unit
Melt Density	1.18	g/cm ³
Additional Information	Nominal Value	Unit
Emission	< 2	ppm
		VDA 275

Processing Information

	Nominal Value	Unit
Injection		
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	13100 to 16000	psi
Drying Recommended	yes	
Hold Pressure Time	8.00	s/mm
Maximum Screw Tangential Speed	472	in/min
Extrusion		
Drying Temperature	167 to 185	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	< 0.20	%
Melt Temperature	383 to 401	°F
Extrusion Melt Temperature, Optimum	392	°F

Notes

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

² 10°C/min

³ 30 min + 5 min/mm of thickness

