

DELTRIN 100ST BK602

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	• Impact Modifier • Mold Release		
Features	• Good Impact Resistance • Good Mold Release	• High Toughness • High Viscosity	• Homopolymer
RoHS Compliance	• Contact Manufacturer		
Automotive Specifications	• ASTM D6778 POM0141	• FORD WSK-M4D681-A	• GM GMP.POM.010
Part Marking Code (ISO 11469)	• >POM-HI<		
Resin ID (ISO 1043)	• POM-HI		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.34	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.1	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	1.8	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.1	%	
Flow	0.80	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	203000	psi	ISO 527-1
Tensile Stress (Yield)	5800	psi	ISO 527-2
Tensile Strain (Yield)	30	%	ISO 527-2
Nominal Tensile Strain at Break	> 50	%	ISO 527-2
Flexural Modulus	160000	psi	ISO 178
Poisson's Ratio	0.43		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	6.7	ft·lb/in ²	
73°F	38	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	216	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	140	°F	ISO 75-2/A
Melting Temperature ²	352	°F	ISO 11357-3
CLTE - Flow	6.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	6.7E-5	in/in/°F	ISO 11359-2
RTI Elec			UL 746B
0.06 in	221	°F	
0.12 in	221	°F	
RTI Imp			UL 746B
0.06 in	185	°F	
0.12 in	185	°F	
RTI Str			UL 746B



0.06 in	185 °F
0.12 in	185 °F
Annealing Temperature	320 °F
Annealing Time - Optional	30.0 min/mm
Flammability	Nominal Value Unit Test Method
Burning Rate ³ (0.0394 in)	< 2.8 in/min ISO 3795
Flame Rating (0.06 in)	HB UL 94
Flammability Classification (0.06 in)	HB IEC 60695-11-10, -20
FMVSS Flammability	B FMVSS 302
Additional Information	Nominal Value Unit Test Method
Emission	< 8 ppm VDA 275

Processing Information

Injection	Nominal Value Unit
Drying Temperature	176 °F
Drying Time - Desiccant Dryer	4.0 to 8.0 hr
Suggested Max Moisture	< 0.050 %
Processing (Melt) Temp	392 to 410 °F
Melt Temperature, Optimum	401 °F
Mold Temperature	104 to 140 °F
Mold Temperature, Optimum	122 °F
Holding Pressure	8700 to 11600 psi
Drying Recommended	yes
Hold Pressure Time	7.50 s/mm
Maximum Screw Tangential Speed	472 in/min
Extrusion	Nominal Value Unit
Drying Temperature	176 °F
Drying Time	4.0 to 8.0 hr
Suggested Max Moisture	< 0.050 %
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 FMVSS 302

