

DELTRIN 500T 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 Mold Release • Impact Modified • Homopolymer • Medium Viscosity		
Uses	• Engineering Parts		
RoHS Compliance	• Contact Manufacturer		
Automotive Specifications	• FORD WSK-M4D681-A2	• GM GMP.POM.016	• STELLANTIS MS-DB-100 CPN3013
Part Marking Code (ISO 11469)	• >POM-I<		
Resin ID (ISO 1043)	• POM-I		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.39	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	12	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.6	%	
Flow	1.5	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	334000	psi	ISO 527-1
Tensile Stress (Yield)	7980	psi	ISO 527-2
Tensile Strain (Yield)	17	%	ISO 527-2
Nominal Tensile Strain at Break	30	%	ISO 527-2
Flexural Modulus	305000	psi	ISO 178
Flexural Stress (3.5% Strain)	8700	psi	ISO 178
Poisson's Ratio	0.39		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in ²	
73°F	5.7	ft·lb/in ²	
Notched Izod Impact Strength			ISO 180/1A
-40°F	4.3	ft·lb/in ²	
-22°F	4.3	ft·lb/in ²	
73°F	5.7	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	293	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	176	°F	ISO 75-2/A
Melting Temperature ²	352	°F	ISO 11357-3
RTI Elec			UL 746B
0.030 in	221	°F	
0.06 in	221	°F	
0.12 in	221	°F	
RTI Imp			UL 746B
0.030 in	185	°F	



0.06 in	185 °F	
0.12 in	185 °F	
RTI Str		UL 746B
0.030 in	185 °F	
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)	2.2	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

Fill Analysis	Nominal Value	Unit	Test Method
Melt Density	1.19	g/cm ³	

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

Notes

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

² 10°C/min

³ FMVSS 302

